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TAFEL

VIERSTELLIGER

LOGARITHMEN.

BEARBEITET

VON

Dr. C. BREMIKER.

BERLIN,
WEIDMANNSCHE BUCHHANDLUNG.
1874.

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VORWORT.

Vierstellige Logarithmen-Tafeln sind im Allgemeinen bisher wenig beachtet worden. Durch die Schule an die siebenstelligen Tafeln gewöhnt, greift man im späteren Leben wieder zu derselben Tafel, wenn einmal eine logarithmische Rechnung ausgeführt werden soll, und es ist dann auch ziemlich gleichgültig, ob einige Stellen mehr als nöthig in Rechnung genommen werden. Sind dagegen lange Rechnungen auszuführen, wird man wohlthun, zuvor genau zu erwägen, wie viel Decimalstellen die Rechnung erfordert, und dann diejenige Tafel benutzen, welche nicht mehr und nicht weniger Stellen enthält. Die Abkürzung mehrstelliger Logarithmen, ebenso die Berücksichtigung der letzten bestrichelten Ziffer sind unpraktisch. Aus diesem Grunde hat man 10-, 7-, 6-, 5-, 4- und 3stellige Tafeln. Mit der geringeren Stellenzahl nimmt das Volumen der Tafel ab, so dass die 3stellige nur noch die Form einer Visitenkarte hat, und das Aufschlagen der Logarithmen wird erleichtert, wenn man nur auf wenigen Seiten zu suchen hat. Aber nicht hierdurch allein ist das bequeme Rechnen bedingt; man will auch mit Leichtigkeit interpoliren, gewissermassen den interpolirten Logarithmen à vue aus der Tafel entnehmen

können, weshalb das Intervall möglichst klein zu nehmen ist. Die vielfach beliebte Tableauform für vierstellige Logarithmen entspricht zwar der ersten Bedingung, kann aber niemals die zweite erfüllen, und ist daher, abgesehen von andern Unbequemlichkeiten, für den steten Gebrauch nicht zu empfehlen.

Andere vierstellige Tafeln in Buchform widmen dem Gegenstande auch nicht die gebührende Aufmerksamkeit, so muss das Trennen der ersten Ziffer der Logarithmen, welches bei fünfzifferigen noch einen Sinn hat, bei vierstelligen unbedingt verworfen werden, anderer fehlerhafter Einrichtungen nicht zu gedenken. Die meisten dieser Tafeln machen den Eindruck einer Spielerei mit Zahlen, der Ernst der Sache wird verkannt. Da aber eine grosse Menge von Rechnungen der vierstelligen Tafel zugewiesen werden muss, so erhellt, dass es mit deren Construction nicht so leicht genommen werden darf. Abgesehen von dem Gebrauche in Schulen, den jeder wohlmeinende Lehrer empfehlen wird, will ich nur einer Klasse von Rechnungen Erwähnung thun, wo vierstellige Logarithmen vollständig ausreichen, nämlich der der Feldmesser-Arbeiten. Es erhellt dieses daraus, dass die Längenmessungen selten einen geringeren Fehler, als $\frac{1}{3}$ pCt. ihrer Länge haben, wogegen der vierstellige Logarithme einen zwanzigfach geringeren hat. Auch die hier zur Anwendung kommenden kleinen Theodoliten, von anderen Winkel-Instrumenten nicht zu reden, erreichen an Genauigkeit nicht den Werth des vierstelligen Logarithmen. Mit Ausnahme der Triangulation, wo fünf Stellen in Rechnung zu ziehen sind, genügen bei allen andern goniometrischen Rechnungen vier Stellen.

Einrichtung und Gebrauch der nachstehenden Tafeln sind im Allgemeinen übereinstimmend mit meinen sieben-,

sechs- und fünfstelligen Tafeln, und ich kann daher, auf jene verweisend, von einer Darlegung der Principien bei Construction der einzelnen Theile, sowie von einer Gebrauchs-Anweisung Abstand nehmen, umsomehr als Jeder, der mit Bewusstsein zur vierstelligen Tafel greift, zu den Eingeweihten zu rechnen ist. Es mögen daher nur die meistens in der Zahl der Stellen begründeten Abweichungen näher besprochen werden.

Die Tafel I. enthält die Logarithmen der Zahlen von 1 bis 2000. Die ersten beiden Seiten, welche bis 1000 gehen, würden genügen; da aber von 100 bis 200 die unbequemeren Differenzen von 43 bis 22 vorkommen, so sind für dieses Intervall die beiden folgenden Seiten von 1000 bis 2000 hinzugefügt, dagegen die Differenz-Täfelchen nur von 22 an gegeben, welche Differenz dem Logarithmus der Zahl 200 entspricht. Die in Tafel II. enthaltenen Zahlen S und T für Bogen von 0 bis 10 Grad können angewendet werden, um Sinus oder Tangente eines kleinen Winkels oder umgekehrt den Winkel aus jenen mit aller Schärfe zu berechnen. Das Argument ist im ersten Falle der Bogen, im andern Log. Sin. oder Log. Tang. Die Tafel III. enthält die Logarithmen der trigonometrischen Functionen, von 0 bis 8 Grad der leichteren Interpolation wegen von Hundertel zu Hundertel Grad fortschreitend, darauf von Zehntel zu Zehntel. Wenn die letztere Abtheilung auf Pag. 24 mit 5 statt mit 8 Grad beginnt, so ist dieses der typographischen Anordnung wegen geschehen, um mit vollen Fünfern und Zehnern von Graden auf jeder Seite abzuschliessen. Die Differenz-Täfelchen gehen in der ersten Abtheilung von 0.5, in der zweiten von 7.0 Grad an. Tafel IV. giebt die Reduction von Graden und Stunden, Minuten auf Decimaltheile des Tages an. Die Tafeln V.

und VI. für Summen und Differenzen, wenn die Logarithmen der Summanden gegeben sind, haben dieselbe Anordnung, wie in der fünf- und sechsstelligen Tafel, da ich diese für die bequemste halte. Hiermit würde dem engeren Bedürfniss genügt sein. Vielfachen Wünschen nachkommend sind indess noch eine Tafel der natürlichen Sinus und Tangenten, No. VII, dann eine Tafel zur Bildung der Fehler-Quadrate, No. VIII, übereinstimmend mit derselben Tafel in der Tafel fünfstelliger Logarithmen, endlich eine Tafel der Antilogarithmen, No. IX, hinzugefügt. Die letztere wird benutzt, wenn von einer Reihe gegebener Logarithmen nach einander die Zahlen gesucht werden, weil dann das geordnete Argument zum Vortheil gereicht.

Berlin, Januar 1874.

BREMIKER.

INHALT.

		Seite
Tafel	I. Die Logarithmen der Zahlen	2
„	II. Logarithmen der Sinus und Tangenten kleiner Bogen .	6
„	III. Die Logarithmen der trigonometrischen Functionen . .	8
„	IV. Grade, Stunden, Minuten und Secunden in Decimaltheilen des Tages	32
„	V. Die Logarithmen der Summen und Differenzen	33
„	VI. Subtractions-Logarithmen	36
„	VII. Die natürlichen Sinus und Tangenten	40
„	VIII. Die Quadrate der Zahlen	50
„	IX. Die Antilogarithmen	58
„	X. Beständige Logarithmen	60

TAFEL I.

DIE

LOGARITHMEN

DER

ZAHLEN.

N.	L. 0	1	2	3	4	5	6	7	8	9
0	—	0000	3010	4771	6021	6990	7782	8451	9031	9542
1	0000	0414	0792	1139	1461	1761	2041	2304	2553	2788
2	3010	3222	3424	3617	3802	3979	4150	4314	4472	4624
3	4771	4914	5051	5185	5315	5441	5563	5682	5798	5911
4	6021	6128	6232	6335	6435	6532	6628	6721	6812	6902
5	6990	7076	7160	7243	7324	7404	7482	7559	7634	7709
6	7782	7853	7924	7993	8062	8129	8195	8261	8325	8388
7	8451	8513	8573	8633	8692	8751	8808	8865	8921	8976
8	9031	9085	9138	9191	9243	9294	9345	9395	9445	9494
9	9542	9590	9638	9685	9731	9777	9823	9868	9912	9956
10	0000	0043	0086	0128	0170	0212	0253	0294	0334	0374
11	0414	0453	0492	0531	0569	0607	0645	0682	0719	0755
12	0792	0828	0864	0899	0934	0969	1004	1038	1072	1106
13	1139	1173	1206	1239	1271	1303	1335	1367	1399	1430
14	1461	1492	1523	1553	1584	1614	1644	1673	1703	1732
15	1761	1790	1818	1847	1875	1903	1931	1959	1987	2014
16	2041	2068	2095	2122	2148	2175	2201	2227	2253	2279
17	2304	2330	2355	2380	2405	2430	2455	2480	2504	2529
18	2553	2577	2601	2625	2648	2672	2695	2718	2742	2765
19	2788	2810	2833	2856	2878	2900	2923	2945	2967	2989
20	3010	3032	3054	3075	3096	3118	3139	3160	3181	3201
21	3222	3243	3263	3284	3304	3324	3345	3365	3385	3404
22	3424	3444	3464	3483	3502	3522	3541	3560	3579	3598
23	3617	3636	3655	3674	3692	3711	3729	3747	3766	3784
24	3802	3820	3838	3856	3874	3892	3909	3927	3945	3962
25	3979	3997	4014	4031	4048	4065	4082	4099	4116	4133
26	4150	4166	4183	4200	4216	4232	4249	4265	4281	4298
27	4314	4330	4346	4362	4378	4393	4409	4425	4440	4456
28	4472	4487	4502	4518	4533	4548	4564	4579	4594	4609
29	4624	4639	4654	4669	4683	4698	4713	4728	4742	4757
30	4771	4786	4800	4814	4829	4843	4857	4871	4886	4900
31	4914	4928	4942	4955	4969	4983	4997	5011	5024	5038
32	5051	5065	5079	5092	5105	5119	5132	5145	5159	5172
33	5185	5198	5211	5224	5237	5250	5263	5276	5289	5302
34	5315	5328	5340	5353	5366	5378	5391	5403	5416	5428
35	5441	5453	5465	5478	5490	5502	5514	5527	5539	5551
36	5563	5575	5587	5599	5611	5623	5635	5647	5658	5670
37	5682	5694	5705	5717	5729	5740	5752	5763	5775	5786
38	5798	5809	5821	5832	5843	5855	5866	5877	5888	5900
39	5911	5922	5933	5944	5955	5966	5977	5988	5999	6010
40	6021	6031	6042	6053	6064	6075	6085	6096	6107	6117
41	6128	6138	6149	6160	6170	6180	6191	6201	6212	6222
42	6232	6243	6253	6263	6274	6284	6294	6304	6314	6325
43	6335	6345	6355	6365	6375	6385	6395	6405	6415	6425
44	6435	6444	6454	6464	6474	6484	6493	6503	6513	6522
45	6532	6542	6551	6561	6571	6580	6590	6599	6609	6618
46	6628	6637	6646	6656	6665	6675	6684	6693	6702	6712
47	6721	6730	6739	6749	6758	6767	6776	6785	6794	6803
48	6812	6821	6830	6839	6848	6857	6866	6875	6884	6893
49	6902	6911	6920	6928	6937	6946	6955	6964	6972	6981
50	6990	6998	7007	7016	7024	7033	7042	7050	7059	7067

P. P.		
	22	21
1	2.2	2.1
2	4.4	4.2
3	6.6	6.3
4	8.8	8.4
5	11.0	10.5
6	13.2	12.6
7	15.4	14.7
8	17.6	16.8
9	19.8	18.9
	20	19
1	2.0	1.9
2	4.0	3.8
3	6.0	5.7
4	8.0	7.6
5	10.0	9.5
6	12.0	11.4
7	14.0	13.3
8	16.0	15.2
9	18.0	17.1
	18	17
1	1.8	1.7
2	3.6	3.4
3	5.4	5.1
4	7.2	6.8
5	9.0	8.5
6	10.8	10.2
7	12.6	11.9
8	14.4	13.6
9	16.2	15.3
	16	15
1	1.6	1.5
2	3.2	3.0
3	4.8	4.5
4	6.4	6.0
5	8.0	7.5
6	9.6	9.0
7	11.2	10.5
8	12.8	12.0
9	14.4	13.5
	14	13
1	1.4	1.3
2	2.8	2.6
3	4.2	3.9
4	5.6	5.2
5	7.0	6.5
6	8.4	7.8
7	9.8	9.1
8	11.2	10.4
9	12.6	11.7
	12	11
1	1.2	1.1
2	2.4	2.2
3	3.6	3.3
4	4.8	4.4
5	6.0	5.5
6	7.2	6.6
7	8.4	7.7
8	9.6	8.8
9	10.8	9.9
	9	8
1	0.9	0.8
2	1.8	1.6
3	2.7	2.4
4	3.6	3.2
5	4.5	4.0
6	5.4	4.8
7	6.3	5.6
8	7.2	6.4
9	8.1	7.2

N.	L. 0	1	2	3	4	5	6	7	8	9
50	6990	6998	7007	7016	7024	7033	7042	7050	7059	7067
51	7076	7084	7093	7101	7110	7118	7126	7135	7143	7152
52	7160	7168	7177	7185	7193	7202	7210	7218	7226	7235
53	7243	7251	7259	7267	7275	7284	7292	7300	7308	7316
54	7324	7332	7340	7348	7356	7364	7372	7380	7388	7396
55	7404	7412	7419	7427	7435	7443	7451	7459	7466	7474
56	7482	7490	7497	7505	7513	7520	7528	7536	7543	7551
57	7559	7566	7574	7582	7589	7597	7604	7612	7619	7627
58	7634	7642	7649	7657	7664	7672	7679	7686	7694	7701
59	7709	7716	7723	7731	7738	7745	7752	7760	7767	7774
60	7782	7789	7796	7803	7810	7818	7825	7832	7839	7846
61	7853	7860	7868	7875	7882	7889	7896	7903	7910	7917
62	7924	7931	7938	7945	7952	7959	7966	7973	7980	7986
63	7993	8000	8007	8014	8021	8028	8035	8041	8048	8055
64	8062	8069	8075	8082	8089	8096	8102	8109	8116	8122
65	8129	8136	8142	8149	8156	8162	8169	8176	8182	8189
66	8195	8202	8209	8215	8222	8228	8235	8241	8248	8254
67	8261	8267	8274	8280	8287	8293	8299	8306	8312	8319
68	8325	8331	8338	8344	8351	8357	8363	8370	8376	8382
69	8388	8395	8401	8407	8414	8420	8426	8432	8439	8445
70	8451	8457	8463	8470	8476	8482	8488	8494	8500	8506
71	8513	8519	8525	8531	8537	8543	8549	8555	8561	8567
72	8573	8579	8585	8591	8597	8603	8609	8615	8621	8627
73	8633	8639	8645	8651	8657	8663	8669	8675	8681	8686
74	8692	8698	8704	8710	8716	8722	8727	8733	8739	8745
75	8751	8756	8762	8768	8774	8779	8785	8791	8797	8802
76	8808	8814	8820	8825	8831	8837	8842	8848	8854	8859
77	8865	8871	8876	8882	8887	8893	8899	8904	8910	8915
78	8921	8927	8932	8938	8943	8949	8954	8960	8965	8971
79	8976	8982	8987	8993	8998	9004	9009	9015	9020	9025
80	9031	9036	9042	9047	9053	9058	9063	9069	9074	9079
81	9085	9090	9096	9101	9106	9112	9117	9122	9128	9133
82	9138	9143	9149	9154	9159	9165	9170	9175	9180	9186
83	9191	9196	9201	9206	9212	9217	9222	9227	9232	9238
84	9243	9248	9253	9258	9263	9269	9274	9279	9284	9289
85	9294	9299	9304	9309	9315	9320	9325	9330	9335	9340
86	9345	9350	9355	9360	9365	9370	9375	9380	9385	9390
87	9395	9400	9405	9410	9415	9420	9425	9430	9435	9440
88	9445	9450	9455	9460	9465	9469	9474	9479	9484	9489
89	9494	9499	9504	9509	9513	9518	9523	9528	9533	9538
90	9542	9547	9552	9557	9562	9566	9571	9576	9581	9586
91	9590	9595	9600	9605	9609	9614	9619	9624	9628	9633
92	9638	9643	9647	9652	9657	9661	9666	9671	9675	9680
93	9685	9689	9694	9699	9703	9708	9713	9717	9722	9727
94	9731	9736	9741	9745	9750	9754	9759	9763	9768	9773
95	9777	9782	9786	9791	9795	9800	9805	9809	9814	9818
96	9823	9827	9832	9836	9841	9845	9850	9854	9859	9863
97	9868	9872	9897	9881	9886	9890	9894	9899	9903	9908
98	9912	9917	9921	9926	9930	9934	9939	9943	9948	9952
99	9956	9961	9965	9969	9974	9978	9983	9987	9991	9996
100	0000	0004	0009	0013	0017	0022	0026	0030	0035	0039
N.	L. 0	1	2	3	4	5	6	7	8	9

P. P.									
9									
1	0.9								
2	1.8								
3	2.7								
4	3.6								
5	4.5								
6	5.4								
7	6.3								
8	7.2								
9	8.1								
8									
1	0.8								
2	1.6								
3	2.4								
4	3.2								
5	4.0								
6	4.8								
7	5.6								
8	6.4								
9	7.2								
7									
1	0.7								
2	1.4								
3	2.1								
4	2.8								
5	3.5								
6	4.2								
7	4.9								
8	5.6								
9	6.3								
6									
1	0.6								
2	1.2								
3	1.8								
4	2.4								
5	3.0								
6	3.6								
7	4.2								
8	4.8								
9	5.4								
5									
1	0.5								
2	1.0								
3	1.5								
4	2.0								
5	2.5								
6	3.0								
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8	4.0								
9	4.5								
4									
1	0.4								
2	0.8								
3	1.2								
4	1.6								
5	2.0								
6	2.4								
7	2.8								
8	3.2								
9	3.6								

N.	L. 0	1	2	3	4	5	6	7	8	9
100	0000	0004	0009	0013	0017	0022	0026	0030	0035	0039
101	0043	0048	0052	0056	0060	0065	0069	0073	0077	0082
102	0086	0090	0095	0099	0103	0107	0111	0116	0120	0124
103	0128	0133	0137	0141	0145	0149	0154	0158	0162	0166
104	0170	0175	0179	0183	0187	0191	0195	0199	0204	0208
105	0212	0216	0220	0224	0228	0233	0237	0241	0245	0249
106	0253	0257	0261	0265	0269	0273	0278	0282	0286	0290
107	0294	0298	0302	0306	0310	0314	0318	0322	0326	0330
108	0334	0338	0342	0346	0350	0354	0358	0362	0366	0370
109	0374	0378	0382	0386	0390	0394	0398	0402	0406	0410
110	0414	0418	0422	0426	0430	0434	0438	0441	0445	0449
111	0453	0457	0461	0465	0469	0473	0477	0481	0484	0488
112	0492	0496	0500	0504	0508	0512	0515	0519	0523	0527
113	0531	0535	0538	0542	0546	0550	0554	0558	0561	0565
114	0569	0573	0577	0580	0584	0588	0592	0596	0599	0603
115	0607	0611	0615	0618	0622	0626	0630	0633	0637	0641
116	0645	0648	0652	0656	0660	0663	0667	0671	0674	0678
117	0682	0686	0689	0693	0697	0700	0704	0708	0711	0715
118	0719	0722	0726	0730	0734	0737	0741	0745	0748	0752
119	0755	0759	0763	0766	0770	0774	0777	0781	0785	0788
120	0792	0795	0799	0803	0806	0810	0813	0817	0821	0824
121	0828	0831	0835	0839	0842	0846	0849	0853	0856	0860
122	0864	0867	0871	0874	0878	0881	0885	0888	0892	0896
123	0899	0903	0906	0910	0913	0917	0920	0924	0927	0931
124	0934	0938	0941	0945	0948	0952	0955	0959	0962	0966
125	0969	0973	0976	0980	0983	0986	0990	0993	0997	1000
126	1004	1007	1011	1014	1017	1021	1024	1028	1031	1035
127	1038	1041	1045	1048	1052	1055	1059	1062	1065	1069
128	1072	1075	1079	1082	1086	1089	1093	1096	1099	1103
129	1106	1109	1113	1116	1119	1123	1126	1129	1133	1136
130	1139	1143	1146	1149	1153	1156	1159	1163	1166	1169
131	1173	1176	1179	1183	1186	1189	1193	1196	1199	1202
132	1206	1209	1212	1216	1219	1222	1225	1229	1232	1235
133	1239	1242	1245	1248	1252	1255	1258	1261	1265	1268
134	1271	1274	1278	1281	1284	1287	1290	1294	1297	1300
135	1303	1307	1310	1313	1316	1319	1323	1326	1329	1332
136	1335	1339	1342	1345	1348	1351	1355	1358	1361	1364
137	1367	1370	1374	1377	1380	1383	1386	1389	1392	1396
138	1399	1402	1405	1408	1411	1414	1418	1421	1424	1427
139	1430	1433	1436	1440	1443	1446	1449	1452	1455	1458
140	1461	1464	1467	1471	1474	1477	1480	1483	1486	1489
141	1492	1495	1498	1501	1504	1508	1511	1514	1517	1520
142	1523	1526	1529	1532	1535	1538	1541	1544	1547	1550
143	1553	1556	1559	1562	1565	1569	1572	1575	1578	1581
144	1584	1587	1590	1593	1596	1599	1602	1605	1608	1611
145	1614	1617	1620	1623	1626	1629	1632	1635	1638	1641
146	1644	1647	1649	1652	1655	1658	1661	1664	1667	1670
147	1673	1676	1679	1682	1685	1688	1691	1694	1697	1700
148	1703	1706	1708	1711	1714	1717	1720	1723	1726	1729
149	1732	1735	1738	1741	1744	1746	1749	1752	1755	1758
150	1761	1764	1767	1770	1772	1775	1778	1781	1784	1787
N.	L. 0	1	2	3	4	5	6	7	8	9

P. P.	
	5
1	0.5
2	1.0
3	1.5
4	2.0
5	2.5
6	3.0
7	3.5
8	4.0
9	4.5
	4
1	0.4
2	0.8
3	1.2
4	1.6
5	2.0
6	2.4
7	2.8
8	3.2
9	3.6
	3
1	0.3
2	0.6
3	0.9
4	1.2
5	1.5
6	1.8
7	2.1
8	2.4
9	2.7
	2
1	0.2
2	0.4
3	0.6
4	0.8
5	1.0
6	1.2
7	1.4
8	1.6
9	1.8

N.	L. 0	1	2	3	4	5	6	7	8	9	P. P.
150	1761	1764	1767	1770	1772	1775	1778	1781	1784	1787	
151	1790	1793	1796	1798	1801	1804	1807	1810	1813	1816	
152	1818	1821	1824	1827	1830	1833	1836	1838	1841	1844	
153	1847	1850	1853	1855	1858	1861	1864	1867	1870	1872	
154	1875	1878	1881	1884	1886	1889	1892	1895	1898	1901	
155	1903	1906	1909	1912	1915	1917	1920	1923	1926	1928	
156	1931	1934	1937	1940	1942	1945	1948	1951	1953	1956	
157	1959	1962	1965	1967	1970	1973	1976	1978	1981	1984	
158	1987	1989	1992	1995	1998	2000	2003	2006	2009	2011	
159	2014	2017	2019	2022	2025	2028	2030	2033	2036	2038	
160	2041	2044	2047	2049	2052	2055	2057	2060	2063	2066	3 1 0.3 2 0.6 3 0.9 4 1.2 5 1.5 6 1.8 7 2.1 8 2.4 9 2.7
161	2068	2071	2074	2076	2079	2082	2084	2087	2090	2092	
162	2095	2098	2101	2103	2106	2109	2111	2114	2117	2119	
163	2122	2125	2127	2130	2133	2135	2138	2140	2143	2146	
164	2148	2151	2154	2156	2159	2162	2164	2167	2170	2172	
165	2175	2177	2180	2183	2185	2188	2191	2193	2196	2198	
166	2201	2204	2206	2209	2212	2214	2217	2219	2222	2225	
167	2227	2230	2232	2235	2238	2240	2243	2245	2248	2251	
168	2253	2256	2258	2261	2263	2266	2269	2271	2274	2276	
169	2279	2281	2284	2287	2289	2292	2294	2297	2299	2302	
170	2304	2307	2310	2312	2315	2317	2320	2322	2325	2327	
171	2330	2333	2335	2338	2340	2343	2345	2348	2350	2353	
172	2355	2358	2360	2363	2365	2368	2370	2373	2375	2378	
173	2380	2383	2385	2388	2390	2393	2395	2398	2400	2403	
174	2405	2408	2410	2413	2415	2418	2420	2423	2425	2428	
175	2430	2433	2435	2438	2440	2443	2445	2448	2450	2453	
176	2455	2458	2460	2463	2465	2467	2470	2472	2475	2477	
177	2480	2482	2485	2487	2490	2492	2494	2497	2499	2502	2 1 0.2 2 0.4 3 0.6 4 0.8 5 1.0 6 1.2 7 1.4 8 1.6 9 1.8
178	2504	2507	2509	2512	2514	2516	2519	2521	2524	2526	
179	2529	2531	2533	2536	2538	2541	2543	2545	2548	2550	
180	2553	2555	2558	2560	2562	2565	2567	2570	2572	2574	
181	2577	2579	2582	2584	2586	2589	2591	2594	2596	2598	
182	2601	2603	2605	2608	2610	2613	2615	2617	2620	2622	
183	2625	2627	2629	2632	2634	2636	2639	2641	2643	2646	
184	2648	2651	2653	2655	2658	2660	2662	2665	2667	2669	
185	2672	2674	2676	2679	2681	2683	2686	2688	2690	2693	
186	2695	2697	2700	2702	2704	2707	2709	2711	2714	2716	
187	2718	2721	2723	2725	2728	2730	2732	2735	2737	2739	
188	2742	2744	2746	2749	2751	2753	2755	2758	2760	2762	
189	2765	2767	2769	2772	2774	2776	2778	2781	2783	2785	
190	2788	2790	2792	2794	2797	2799	2801	2804	2806	2808	
191	2810	2813	2815	2817	2819	2822	2824	2826	2828	2831	
192	2833	2835	2838	2840	2842	2844	2847	2849	2851	2853	
193	2856	2858	2860	2862	2865	2867	2869	2871	2874	2876	
194	2878	2880	2883	2885	2887	2889	2891	2894	2896	2898	
195	2900	2903	2905	2907	2909	2911	2914	2916	2918	2920	
196	2923	2925	2927	2929	2931	2934	2936	2938	2940	2942	
197	2945	2947	2949	2951	2953	2956	2958	2960	2962	2964	
198	2967	2969	2971	2973	2975	2978	2980	2982	2984	2986	
199	2989	2991	2993	2995	2997	2999	3002	3004	3006	3008	
200	3010	3012	3015	3017	3019	3021	3023	3025	3028	3030	
N.	L. 0	1	2	3	4	5	6	7	8	9	

Grade	S.	Lg. Sinus	T.	Lg. Tang.	Grade	S.	Lg. Sinus	T.	Lg. Tang.
0.0	1.7581	—	1.7581	—	5.0	1.7587	8.9403	1.7570	8.9420
1	1.7581	7.2419	1.7581	7.2419	1	1.7587	8.9489	1.7570	8.9506
2	1.7581	7.5429	1.7581	7.5429	2	1.7587	8.9573	1.7569	8.9591
3	1.7581	7.7190	1.7581	7.7190	3	1.7587	8.9655	1.7569	8.9674
4	1.7581	7.8439	1.7581	7.8439	4	1.7588	8.9736	1.7568	8.9756
5	1.7581	7.9408	1.7581	7.9409	5	1.7588	8.9816	1.7568	8.9836
6	1.7581	8.0200	1.7581	8.0200	6	1.7588	8.9894	1.7567	8.9915
7	1.7581	8.0870	1.7581	8.0870	7	1.7588	8.9970	1.7567	8.9992
8	1.7581	8.1450	1.7581	8.1450	8	1.7589	9.0046	1.7566	9.0068
9	1.7581	8.1961	1.7581	8.1962	9	1.7589	9.0120	1.7566	9.0143
1.0	1.7581	8.2419	1.7581	8.2419	6.0	1.7589	9.0192	1.7565	9.0216
1	1.7581	8.2832	1.7581	8.2833	1	1.7589	9.0264	1.7565	9.0289
2	1.7582	8.3210	1.7581	8.3211	2	1.7590	9.0334	1.7564	9.0360
3	1.7582	8.3558	1.7580	8.3559	3	1.7590	9.0403	1.7564	9.0430
4	1.7582	8.3880	1.7580	8.3881	4	1.7590	9.0472	1.7563	9.0499
5	1.7582	8.4179	1.7580	8.4181	5	1.7591	9.0539	1.7563	9.0567
6	1.7582	8.4459	1.7580	8.4461	6	1.7591	9.0605	1.7562	9.0633
7	1.7582	8.4723	1.7580	8.4725	7	1.7591	9.0670	1.7562	9.0699
8	1.7582	8.4971	1.7580	8.4973	8	1.7591	9.0734	1.7561	9.0764
9	1.7582	8.5206	1.7580	8.5208	9	1.7592	9.0797	1.7560	9.0828
2.0	1.7582	8.5428	1.7579	8.5431	7.0	1.7592	9.0859	1.7560	9.0891
1	1.7582	8.5640	1.7579	8.5643	1	1.7592	9.0920	1.7559	9.0954
2	1.7582	8.5842	1.7579	8.5845	2	1.7593	9.0981	1.7558	9.1015
3	1.7582	8.6035	1.7579	8.6038	3	1.7593	9.1040	1.7558	9.1076
4	1.7582	8.6220	1.7579	8.6223	4	1.7593	9.1099	1.7557	9.1135
5	1.7583	8.6397	1.7578	8.6401	5	1.7594	9.1157	1.7556	9.1194
6	1.7583	8.6567	1.7578	8.6571	6	1.7594	9.1214	1.7556	9.1252
7	1.7583	8.6731	1.7578	8.6736	7	1.7594	9.1271	1.7555	9.1310
8	1.7583	8.6889	1.7578	8.6894	8	1.7595	9.1326	1.7554	9.1367
9	1.7583	8.7040	1.7578	8.7046	9	1.7595	9.1381	1.7554	9.1423
3.0	1.7583	8.7188	1.7577	8.7194	8.0	1.7595	9.1436	1.7553	9.1478
1	1.7583	8.7330	1.7577	8.7337	1	1.7596	9.1489	1.7552	9.1533
2	1.7583	8.7468	1.7577	8.7475	2	1.7596	9.1542	1.7551	9.1587
3	1.7584	8.7602	1.7576	8.7609	3	1.7596	9.1594	1.7551	9.1640
4	1.7584	8.7731	1.7576	8.7739	4	1.7597	9.1646	1.7550	9.1693
5	1.7584	8.7857	1.7576	8.7865	5	1.7597	9.1697	1.7549	9.1745
6	1.7584	8.7979	1.7576	8.7988	6	1.7598	9.1747	1.7548	9.1797
7	1.7584	8.8098	1.7575	8.8107	7	1.7598	9.1797	1.7548	9.1848
8	1.7584	8.8213	1.7575	8.8223	8	1.7598	9.1847	1.7547	9.1898
9	1.7585	8.8326	1.7575	8.8336	9	1.7599	9.1895	1.7546	9.1948
4.0	1.7585	8.8436	1.7574	8.8446	9.0	1.7599	9.1943	1.7545	9.1997
1	1.7585	8.8543	1.7574	8.8554	1	1.7599	9.1991	1.7544	9.2046
2	1.7585	8.8647	1.7573	8.8659	2	1.7600	9.2038	1.7544	9.2094
3	1.7585	8.8749	1.7573	8.8762	3	1.7600	9.2085	1.7543	9.2142
4	1.7585	8.8849	1.7573	8.8862	4	1.7601	9.2131	1.7542	9.2189
5	1.7586	8.8946	1.7572	8.8960	5	1.7601	9.2176	1.7541	9.2236
6	1.7586	8.9042	1.7572	8.9056	6	1.7602	9.2221	1.7540	9.2282
7	1.7586	8.9135	1.7571	8.9150	7	1.7602	9.2266	1.7539	9.2328
8	1.7586	8.9226	1.7571	8.9241	8	1.7602	9.2310	1.7539	9.2374
9	1.7586	8.9315	1.7571	8.9331	9	1.7603	9.2353	1.7538	9.2419
5.0	1.7587	8.9403	1.7570	8.9420	10.0	1.7603	9.2397	1.7537	9.2463

Log. Grade = Lg. Sinus + S.
Log. Grade = Lg. Tang. + T.

Lg. Sinus = Log. Grade — S.
Lg. Tang. = Log. Grade — T.

TAFEL III.

DIE

LOGARITHMEN

DER

TRIGONOMETRISCHEN FUNCTIONEN,

VON 0° BIS 8°

FÜR JEDES HUNDERTEL,

VON 8° BIS 45°

FÜR JEDES ZEHNTEL

DES

GRADES.

′/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot	Lg. Cos.		P. P.		
00	—		—		—	0.0000	100		86	85	84
01	6.2419		6.2419		3.7581	0.0000	99	1	8.6	8.5	8.4
02	6.5429	—	6.5429	—	3.4571	0.0000	98	2	17.2	17.0	16.8
03	6.7190	—	6.7190	—	3.2810	0.0000	97	3	25.8	25.5	25.2
04	6.8439		6.8439		3.1561	0.0000	96	4	34.4	34.0	33.6
05	6.9408	969	6.9408	969	3.0592	0.0000	95	5	43.0	42.5	42.0
06	7.0200	792	7.0200	792	2.9800	0.0000	94	6	51.6	51.0	50.4
07	7.0870	670	7.0870	670	2.9130	0.0000	93	7	60.2	59.5	58.8
08	7.1450	580	7.1450	580	2.8550	0.0000	92	8	68.8	68.0	67.2
09	7.1961	511	7.1961	511	2.8039	0.0000	91	9	77.4	76.5	75.6
10	7.2419	458	7.2419	458	2.7581	0.0000	90		83	82	81
11	7.2833	414	7.2833	414	2.7167	0.0000	89	1	8.3	8.2	8.1
12	7.3211	378	7.3211	378	2.6789	0.0000	88	2	16.6	16.4	16.2
13	7.3558	347	7.3558	347	2.6442	0.0000	87	3	24.9	24.6	24.3
14	7.3880	322	7.3880	322	2.6120	0.0000	86	4	33.2	32.8	32.4
15	7.4180	300	7.4180	300	2.5820	0.0000	85	5	41.5	41.0	40.5
16	7.4460	280	7.4460	280	2.5540	0.0000	84	6	49.8	49.2	48.6
17	7.4723	263	7.4723	263	2.5277	0.0000	83	7	58.1	57.4	56.7
18	7.4971	248	7.4972	249	2.5028	0.0000	82	8	66.4	65.6	64.8
19	7.5206	235	7.5206	234	2.4794	0.0000	81	9	74.7	73.8	72.9
20	7.5429	223	7.5429	223	2.4571	0.0000	80		79	78	77
21	7.5641	212	7.5641	212	2.4359	0.0000	79	1	7.9	7.8	7.7
22	7.5843	202	7.5843	202	2.4157	0.0000	78	2	15.8	15.6	15.4
23	7.6036	193	7.6036	193	2.3964	0.0000	77	3	23.7	23.4	23.1
24	7.6221	185	7.6221	185	2.3779	0.0000	76	4	31.6	31.2	30.8
25	7.6398	177	7.6398	177	2.3602	0.0000	75	5	39.5	39.0	38.5
26	7.6568	170	7.6569	171	2.3431	0.0000	74	6	47.4	46.8	46.2
27	7.6732	164	7.6732	163	2.3268	0.0000	73	7	55.3	54.6	53.9
28	7.6890	158	7.6890	158	2.3110	0.0000	72	8	63.2	62.4	61.6
29	7.7043	153	7.7043	153	2.2957	0.0000	71	9	71.1	70.2	69.3
30	7.7190	147	7.7190	147	2.2810	0.0000	70		76	75	74
31	7.7332	142	7.7332	142	2.2668	0.0000	69	1	7.6	7.5	7.4
32	7.7470	138	7.7470	138	2.2530	0.0000	68	2	15.2	15.0	14.8
33	7.7604	134	7.7604	134	2.2396	0.0000	67	3	22.8	22.5	22.2
34	7.7734	130	7.7734	130	2.2266	0.0000	66	4	30.4	30.0	29.6
35	7.7859	125	7.7860	126	2.2140	0.0000	65	5	38.0	37.5	37.0
36	7.7982	123	7.7982	122	2.2018	0.0000	64	6	45.6	45.0	44.4
37	7.8101	119	7.8101	119	2.1899	0.0000	63	7	53.2	52.5	51.8
38	7.8217	116	7.8217	116	2.1783	0.0000	62	8	60.8	60.0	59.2
39	7.8329	112	7.8329	112	2.1671	0.0000	61	9	68.4	67.5	66.6
40	7.8439	110	7.8439	110	2.1561	0.0000	60		73	72	71
41	7.8547	108	7.8547	108	2.1453	0.0000	59	1	7.3	7.2	7.1
42	7.8651	104	7.8651	104	2.1349	0.0000	58	2	14.6	14.4	14.2
43	7.8753	102	7.8754	103	2.1246	0.0000	57	3	21.9	21.6	21.3
44	7.8853	100	7.8853	99	2.1147	0.0000	56	4	29.2	28.8	28.4
45	7.8951	98	7.8951	98	2.1049	0.0000	55	5	36.5	36.0	35.5
46	7.9046	95	7.9046	95	2.0954	0.0000	54	6	43.8	43.2	42.6
47	7.9140	94	7.9140	94	2.0860	0.0000	53	7	51.1	50.4	49.7
48	7.9231	91	7.9231	91	2.0769	0.0000	52	8	58.4	57.6	56.8
49	7.9321	90	7.9321	90	2.0678	0.0000	51	9	65.7	64.8	63.9
50	7.9408	87	7.9409	88	2.0591	0.0000	50		69	68	67
								1	6.9	6.8	6.7
								2	13.8	13.6	13.4
								3	20.7	20.4	20.1
								4	27.6	27.2	26.8
								5	34.5	34.0	33.5
								6	41.4	40.8	40.2
								7	48.3	47.6	46.9
								8	55.2	54.4	53.6
								9	62.1	61.2	60.3
									66	65	64
								1	6.6	6.5	6.4
								2	13.2	13.0	12.8
								3	19.8	19.5	19.2
								4	26.4	26.0	25.6
								5	33.0	32.5	32.0
								6	39.6	39.0	38.4
								7	46.2	45.5	44.8
								8	52.8	52.0	51.2
								9	59.4	58.5	57.6
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	′/100				

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.	
50	7.9408	86	7.9409	86	2.0591	0.0000	50
51	7.9494	85	7.9495	84	2.0505	0.0000	49
52	7.9579	82	7.9579	83	2.0421	0.0000	48
53	7.9661	82	7.9662	81	2.0338	0.0000	47
54	7.9743	79	7.9743	80	2.0257	0.0000	46
55	7.9822	79	7.9823	78	2.0177	0.0000	45
56	7.9901	76	7.9901	77	2.0099	0.0000	44
57	7.9977	76	7.9978	75	2.0022	0.0000	43
58	8.0053	74	8.0053	74	1.9947	0.0000	42
59	8.0127	73	8.0127	73	1.9873	0.0000	41
60	8.0200	72	8.0200	72	1.9800	0.0000	40
61	8.0272	71	8.0272	71	1.9728	0.0000	39
62	8.0343	69	8.0343	69	1.9657	0.0000	38
63	8.0412	68	8.0412	69	1.9588	0.0000	37
64	8.0480	68	8.0481	67	1.9519	0.0000	36
65	8.0548	66	8.0548	66	1.9452	0.0000	35
66	8.0614	65	8.0614	66	1.9386	0.0000	34
67	8.0679	65	8.0680	64	1.9320	0.0000	33
68	8.0744	63	8.0744	63	1.9256	0.0000	32
69	8.0807	63	8.0807	63	1.9193	0.0000	31
70	8.0870	61	8.0870	62	1.9130	0.0000	30
71	8.0931	61	8.0932	60	1.9068	0.0000	29
72	8.0992	60	8.0992	60	1.9008	0.0000	28
73	8.1052	59	8.1052	59	1.8948	0.0000	27
74	8.1111	58	8.1111	59	1.8889	0.0000	26
75	8.1169	58	8.1170	57	1.8830	0.0000	25
76	8.1227	57	8.1227	57	1.8773	0.0000	24
77	8.1284	56	8.1284	56	1.8716	0.0000	23
78	8.1340	55	8.1340	55	1.8660	0.0000	22
79	8.1395	55	8.1395	55	1.8605	0.0000	21
80	8.1450	53	8.1450	54	1.8550	0.0000	20
81	8.1503	54	8.1504	53	1.8496	0.0000	19
82	8.1557	52	8.1557	53	1.8443	0.0000	18
83	8.1609	52	8.1610	52	1.8390	0.0000	17
84	8.1661	52	8.1662	51	1.8338	0.0000	16
85	8.1713	51	8.1713	51	1.8287	0.0000	15
86	8.1764	50	8.1764	50	1.8236	0.0000	14
87	8.1814	49	8.1814	50	1.8186	9.9999	13
88	8.1863	49	8.1864	49	1.8136	9.9999	12
89	8.1912	49	8.1913	49	1.8087	9.9999	11
90	8.1961	48	8.1962	48	1.8038	9.9999	10
91	8.2009	47	8.2010	47	1.7990	9.9999	09
92	8.2056	47	8.2057	47	1.7943	9.9999	08
93	8.2103	47	8.2104	46	1.7896	9.9999	07
94	8.2150	46	8.2150	46	1.7850	9.9999	06
95	8.2196	45	8.2196	46	1.7804	9.9999	05
96	8.2241	45	8.2242	45	1.7758	9.9999	04
97	8.2286	45	8.2287	44	1.7713	9.9999	03
98	8.2331	44	8.2331	45	1.7669	9.9999	02
99	8.2375	44	8.2376	43	1.7624	9.9999	01
100	8.2419		8.2419		1.7581	9.9999	00
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100

P. P.			
	63	62	61
1	6.3	6.2	6.1
2	12.6	12.4	12.2
3	18.9	18.6	18.3
4	25.2	24.8	24.4
5	31.5	31.0	30.5
6	37.8	37.2	36.6
7	44.1	43.4	42.7
8	50.4	49.6	48.8
9	56.7	55.8	54.9
	60	59	58
1	6.0	5.9	5.8
2	12.0	11.8	11.6
3	18.0	17.7	17.4
4	24.0	23.6	23.2
5	30.0	29.5	29.0
6	36.0	35.4	34.8
7	42.0	41.3	40.6
8	48.0	47.2	46.4
9	54.0	53.1	52.2
	57	56	55
1	5.7	5.6	5.5
2	11.4	11.2	11.0
3	17.1	16.8	16.5
4	22.8	22.4	22.0
5	28.5	28.0	27.5
6	34.2	33.6	33.0
7	39.9	39.2	38.5
8	45.6	44.8	44.0
9	51.3	50.4	49.5
	54	53	52
1	5.4	5.3	5.2
2	10.8	10.6	10.4
3	16.2	15.9	15.6
4	21.6	21.2	20.8
5	27.0	26.5	26.0
6	32.4	31.8	31.2
7	37.8	37.1	36.4
8	43.2	42.4	41.6
9	48.6	47.7	46.8
	51	50	49
1	5.1	5.0	4.9
2	10.2	10.0	9.8
3	15.3	15.0	14.7
4	20.4	20.0	19.6
5	25.5	25.0	24.5
6	30.6	30.0	29.4
7	35.7	35.0	34.3
8	40.8	40.0	39.2
9	45.9	45.0	44.1
	48	47	46
1	4.8	4.7	4.6
2	9.6	9.4	9.2
3	14.4	14.1	13.8
4	19.2	18.8	18.4
5	24.0	23.5	23.0
6	28.8	28.2	27.6
7	33.6	32.9	32.2
8	38.4	37.6	36.8
9	43.2	42.3	41.4
	45	44	43
1	4.5	4.4	4.3
2	9.0	8.8	8.6
3	13.5	13.2	12.9
4	18.0	17.6	17.2
5	22.5	22.0	21.5
6	27.0	26.4	25.8
7	31.5	30.8	30.1
8	36.0	35.2	34.4
9	40.5	39.6	38.7

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.		
00	8.2419		8.2419		1.7581	9.9999	100		43	42
		43		43				1	4.3	4.2
01	8.2462		8.2462		1.7538	9.9999	99	2	8.6	8.4
		43		43				3	12.9	12.6
02	8.2505		8.2505		1.7495	9.9999	98	4	17.2	16.8
		42		43				5	21.5	21.0
03	8.2547		8.2548		1.7452	9.9999	97	6	25.8	25.2
		42		42				7	30.1	29.4
04	8.2589		8.2590		1.7410	9.9999	96	8	34.4	33.6
		41		41				9	38.7	37.8
05	8.2630		8.2631		1.7369	9.9999	95			
		42		41						
06	8.2672		8.2672		1.7328	9.9999	94			
		40		41						
07	8.2712		8.2713		1.7287	9.9999	93		41	40
		41		41				1	4.1	4.0
08	8.2753		8.2754		1.7246	9.9999	92	2	8.2	8.0
		40		40				3	12.3	12.0
09	8.2793		8.2794		1.7206	9.9999	91	4	16.4	16.0
		39		39				5	20.5	20.0
10	8.2832		8.2833		1.7167	9.9999	90	6	24.6	24.0
		40		40				7	28.7	28.0
11	8.2872		8.2873		1.7127	9.9999	89	8	32.8	32.0
		39		39				9	36.9	36.0
12	8.2911		8.2912		1.7088	9.9999	88			
		38		38						
13	8.2949		8.2950		1.7050	9.9999	87			
		39		38						
14	8.2988		8.2988		1.7012	9.9999	86		39	38
		37		38				1	3.9	3.8
15	8.3025		8.3026		1.6974	9.9999	85	2	7.8	7.6
		38		38				3	11.7	11.4
16	8.3063		8.3064		1.6936	9.9999	84	4	15.6	15.2
		37		37				5	19.5	19.0
17	8.3100		8.3101		1.6899	9.9999	83	6	23.4	22.8
		37		37				7	27.3	26.6
18	8.3137		8.3138		1.6862	9.9999	82	8	31.2	30.4
		37		37				9	35.1	34.2
19	8.3174		8.3175		1.6825	9.9999	81			
		36		36						
20	8.3210		8.3211		1.6789	9.9999	80			
		36		36						
21	8.3246		8.3247		1.6753	9.9999	79		37	36
		36		36				1	3.7	3.6
22	8.3282		8.3283		1.6717	9.9999	78	2	7.4	7.2
		35		35				3	11.1	10.8
23	8.3317		8.3318		1.6682	9.9999	77	4	14.8	14.4
		36		36				5	18.5	18.0
24	8.3353		8.3354		1.6646	9.9999	76	6	22.2	21.6
		35		35				7	25.9	25.2
25	8.3388		8.3389		1.6617	9.9999	75	8	29.6	28.8
		34		34				9	33.3	32.4
26	8.3422		8.3423		1.6571	9.9999	74			
		34		35						
27	8.3456		8.3458		1.6542	9.9999	73		35	34
		35		34				1	3.5	3.4
28	8.3491		8.3492		1.6508	9.9999	72	2	7.0	6.8
		33		33				3	10.5	10.2
29	8.3524		8.3525		1.6475	9.9999	71	4	14.0	13.6
		34		34				5	17.5	17.0
30	8.3558		8.3559		1.6441	9.9999	70	6	21.0	20.4
		33		33				7	24.5	23.8
31	8.3591		8.3592		1.6408	9.9999	69	8	28.0	27.2
		33		33				9	31.5	30.6
32	8.3624		8.3625		1.6375	9.9999	68			
		33		33						
33	8.3657		8.3658		1.6342	9.9999	67			
		32		33						
34	8.3689		8.3691		1.6309	9.9999	66		33	32
		33		32				1	3.3	3.2
35	8.3722		8.3723		1.6277	9.9999	65	2	6.6	6.4
		32		32				3	9.9	9.6
36	8.3754		8.3755		1.6245	9.9999	64	4	13.2	12.8
		32		32				5	16.5	16.0
37	8.3786		8.3787		1.6213	9.9999	63	6	19.8	19.2
		31		31				7	23.1	22.4
38	8.3817		8.3818		1.6182	9.9999	62	8	26.4	25.6
		31		32				9	29.7	28.8
39	8.3848		8.3850		1.6150	9.9999	61			
		32		31						
40	8.3880		8.3881		1.6119	9.9999	60			
		31		31						
41	8.3911		8.3912		1.6088	9.9999	59		31	29
		30		31				1	3.1	2.9
42	8.3941		8.3943		1.6057	9.9999	58	2	6.2	5.8
		31		30				3	9.3	8.7
43	8.3972		8.3973		1.6027	9.9999	57	4	12.4	11.6
		30		30				5	15.5	14.5
44	8.4002		8.4003		1.5997	9.9999	56	6	18.6	17.4
		30		30				7	21.7	20.3
45	8.4032		8.4033		1.5967	9.9999	55	8	24.8	23.2
		30		30				9	27.9	26.1
46	8.4062		8.4063		1.5937	9.9999	54			
		29		30						
47	8.4091		8.4093		1.5907	9.9999	53			
		30		29						
48	8.4121		8.4122		1.5878	9.9999	52			
		29		30						
49	8.4150		8.4152		1.5848	9.9999	51			
		29		29						
50	8.4179		8.4181		1.5819	9.9999	50			
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100			

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
50	8.4179		8.4181		1.5819	9.9999	50	
		29		29				29 28
51	8.4208		8.4210		1.5790	9.9998	49	1 2.9 2.8
52	8.4237	29	8.4238	28	1.5762	9.9998	48	2 5.8 5.6
53	8.4265	28	8.4267	29	1.5733	9.9998	47	3 8.7 8.4
		28		28				4 11.6 11.2
54	8.4293		8.4295		1.5705	9.9998	46	5 14.5 14.0
55	8.4322	29	8.4323	28	1.5677	9.9998	45	6 17.4 16.8
56	8.4349	27	8.4351	28	1.5649	9.9998	44	7 20.3 19.6
		28		28				8 23.2 22.4
57	8.4377		8.4379		1.5621	9.9998	43	9 26.1 25.2
58	8.4405	28	8.4406	27	1.5594	9.9998	42	
59	8.4432	27	8.4434	28	1.5566	9.9998	41	
		27		27				27
60	8.4459		8.4461		1.5539	9.9998	40	1 2.7
		27		27				2 5.4
61	8.4486		8.4488		1.5512	9.9998	39	3 8.1
62	8.4513	27	8.4515	27	1.5485	9.9998	38	4 10.8
63	8.4540	27	8.4542	27	1.5458	9.9998	37	5 13.5
		27		26				6 16.2
64	8.4567		8.4568		1.5432	9.9998	36	7 18.9
65	8.4593	26	8.4595	27	1.5405	9.9998	35	8 21.6
66	8 4619	26	8.4621	26	1.5379	9.9998	34	9 24.3
		26		26				
67	8.4645		8.4647		1.5353	9.9998	33	
68	8.4671	26	8.4673	26	1.5327	9.9998	32	26 25
69	8.4697	26	8.4699	26	1.5301	9.9998	31	1 2.6 2.5
		26		26				2 5.2 5.0
70	8.4723		8.4725		1.5275	9.9998	30	3 7.8 7.5
		25		25				4 10.4 10.0
71	8.4748		8.4750		1.5250	9.9998	29	5 13.0 12.5
72	8.4773	25	8.4775	25	1.5225	9.9998	28	6 15.6 15.0
73	8.4799	26	8.4801	26	1.5199	9.9998	27	7 18.2 17.5
		25		25				8 20.8 20.0
74	8.4824		8.4826		1.5174	9.9998	26	9 23.4 22.5
75	8.4848	24	8.4851	25	1.5149	9.9998	25	
76	8.4873	25	8.4875	24	1.5125	9.9998	24	
		25		25				24
77	8.4898		8.4900		1.5100	9.9998	23	1 2.4
78	8.4922	24	8.4924	24	1.5076	9.9998	22	2 4.8
79	8.4947	25	8.4949	25	1.5051	9.9998	21	3 7.2
		24		24				4 9.6
80	8.4971		8.4973		1.5027	9.9998	20	5 12.0
		24		24				6 14.4
81	8.4995		8.4997		1.5003	9.9998	19	7 16.8
82	8.5019	24	8.5021	24	1.4979	9.9998	18	8 19.2
83	8.5043	24	8.5045	24	1.4955	9.9998	17	9 21.6
		23		23				
84	8.5066		8.5068		1.4932	9.9998	16	
85	8.5090	24	8.5092	24	1.4908	9.9998	15	23 22
86	8.5113	23	8.5115	23	1.4885	9.9998	14	1 2.3 2.2
		23		24				2 4.6 4.4
87	8.5136		8.5139		1.4861	9.9998	13	3 6.9 6.6
88	8.5160	24	8.5162	23	1.4838	9.9998	12	4 9.2 8.8
89	8.5183	23	8.5185	23	1.4815	9.9998	11	5 11.5 11.0
		23		23				6 13.8 13.2
90	8.5206		8.5208		1.4792	9.9998	10	7 16.1 15.4
		22		23				8 18.4 17.6
91	8.5228		8.5231		1.4769	9.9998	09	9 20.7 19.8
92	8.5251	23	8.5253	22	1.4747	9.9998	08	
93	8.5274	23	8.5276	23	1.4724	9.9998	07	
		22		22				21
94	8.5296		8.5298		1.4702	9.9998	06	1 2.1
95	8.5318	22	8.5321	23	1.4679	9.9997	05	2 4.2
96	8.5340	22	8.5343	22	1.4657	9.9997	04	3 6.3
		23		22				4 8.4
97	8.5363		8.5365		1.4635	9.9997	03	5 10.5
98	8.5385	22	8.5387	22	1.4613	9.9997	02	6 12.6
99	8.5406	21	8.5409	22	1.4591	9.9997	01	7 14.7
		22		22				8 16.8
100	8.5428		8.5431		1.4569	9.9997	00	9 18.9
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot	Lg. Cos.		P. P.
00	8.5428		8.5431		1.4569	9.9997	100	
		22		22				22
01	8.5450		8.5453		1.4547	9.9997	99	1 2.2
02	8.5471	21	8.5474	21	1.4526	9.9997	98	2 4.4
03	8.5493	22	8.5496	22	1.4504	9.9997	97	3 6.6
		21		21				4 8.8
04	8.5514		8.5517		1.4483	9.9997	96	5 11.0
05	8.5535	21	8.5538	21	1.4462	9.9997	95	6 13.2
06	8.5557	22	8.5559	21	1.4441	9.9997	94	7 15.4
		21		21				8 17.6
07	8.5578		8.5580		1.4420	9.9997	93	9 19.8
08	8.5598	20	8.5601	21	1.4399	9.9997	92	
09	8.5619	21	8.5622	21	1.4378	9.9997	91	
		21		21				21
10	8.5640		8.5643		1.4357	9.9997	90	1 2.1
		21		21				2 4.2
11	8.5661		8.5664		1.4336	9.9997	89	3 6.3
12	8.5681	20	8.5684	20	1.4316	9.9997	88	4 8.4
13	8.5702	21	8.5705	21	1.4295	9.9997	87	5 10.5
		20		20				6 12.6
14	8.5722		8.5725		1.4275	9.9997	86	7 14.7
15	8.5742	20	8.5745	20	1.4255	9.9997	85	8 16.8
16	8.5762	20	8.5765	20	1.4235	9.9997	84	9 18.9
		20		20				
17	8.5782		8.5785		1.4215	9.9997	83	
18	8.5802	20	8.5805	20	1.4195	9.9997	82	
19	8.5822	20	8.5825	20	1.4175	9.9997	81	20
		20		20				1 2.0
20	8.5842		8.5845		1.4155	9.9997	80	2 4.0
		20		20				3 6.0
21	8.5862		8.5865		1.4135	9.9997	79	4 8.0
22	8.5881	19	8.5884	19	1.4116	9.9997	78	5 10.0
23	8.5901	20	8.5904	20	1.4096	9.9997	77	6 12.0
		19		19				7 14.0
24	8.5920		8.5923		1.4077	9.9997	76	8 16.0
25	8.5939	19	8.5943	20	1.4057	9.9997	75	9 18.0
26	8.5959	20	8.5962	19	1.4038	9.9997	74	
		19		19				19
27	8.5978		8.5981		1.4019	9.9997	73	1 1.9
28	8.5997	19	8.6000	19	1.4000	9.9997	72	2 3.8
29	8.6016	19	8.6019	19	1.3981	9.9997	71	3 5.7
		19		19				4 7.6
30	8.6035		8.6038		1.3962	9.9996	70	5 9.5
		19		19				6 11.4
31	8.6054		8.6057		1.3943	9.9996	69	7 13.3
32	8.6072	18	8.6076	19	1.3924	9.9996	68	8 15.2
33	8.6091	19	8.6095	19	1.3905	9.9996	67	9 17.1
		19		18				
34	8.6110		8.6113		1.3887	9.9996	66	
35	8.6128	18	8.6132	19	1.3868	9.9996	65	18
36	8.6147	19	8.6150	18	1.3850	9.9996	64	1 1.8
		18		19				2 3.6
37	8.6165		8.6169		1.3831	9.9996	63	3 5.4
38	8.6183	18	8.6187	18	1.3813	9.9996	62	4 7.2
39	8.6201	18	8.6205	18	1.3795	9.9996	61	5 9.0
		19		18				6 10.8
40	8.6220		8.6223		1.3777	9.9996	60	7 12.6
		18		19				8 14.4
41	8.6238		8.6242		1.3758	9.9996	59	9 16.2
42	8.6256	18	8.6260	18	1.3740	9.9996	58	
43	8.6274	18	8.6277	17	1.3723	9.9996	57	17
		17		18				1 1.7
44	8.6291		8.6295		1.3705	9.9996	56	2 3.4
45	8.6309	18	8.6313	18	1.3687	9.9996	55	3 5.1
46	8.6327	18	8.6331	18	1.3669	9.9996	54	4 6.8
		17		17				5 8.5
47	8.6344		8.6348		1.3652	9.9996	53	6 10.2
48	8.6362	18	8.6366	18	1.3634	9.9996	52	7 11.9
49	8.6379	17	8.6384	18	1.3616	9.9996	51	8 13.6
		18		17				9 15.3
50	8.6397		8.6401		1.3599	9.9996	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
50	8.6397		8.6401		1.3599	9.9996	50	
		17		17				
51	8.6414		8.6418		1.3582	9.9996	49	
52	8.6431	17	8.6436	18	1.3564	9.9996	48	
53	8.6449	18	8.6453	17	1.3547	9.9996	47	18
		17		17				1 1.8
54	8.6466		8.6470		1.3530	9.9996	46	2 3.6
55	8.6483	17	8.6487	17	1.3513	9.9996	45	3 5.4
56	8.6500	17	8.6504	17	1.3496	9.9996	44	4 7.2
		17		17				5 9.0
57	8.6517		8.6521		1.3479	9.9996	43	6 10.8
58	8.6534	17	8.6538	17	1.3462	9.9996	42	7 12.6
59	8.6550	16	8.6555	17	1.3445	9.9996	41	8 14.4
60	8.6567	17	8.6571	16	1.3429	9.9996	40	9 16.2
		17		17				
61	8.6584		8.6588		1.3412	9.9995	39	
62	8.6600	16	8.6605	17	1.3395	9.9995	38	
63	8.6617	17	8.6621	16	1.3379	9.9995	37	17
		16		17				1 1.7
64	8.6633		8.6638		1.3362	9.9995	36	2 3.4
65	8.6650	17	8.6654	16	1.3346	9.9995	35	3 5.1
66	8.6666	16	8.6671	17	1.3329	9.9995	34	4 6.8
		16		16				5 8.5
67	8.6682		8.6687		1.3313	9.9995	33	6 10.2
68	8.6699	17	8.6703	16	1.3297	9.9995	32	7 11.9
69	8.6715	16	8.6719	16	1.3281	9.9995	31	8 13.6
70	8.6731	16	8.6736	17	1.3264	9.9995	30	9 15.3
		16		16				
71	8.6747		8.6752		1.3248	9.9995	29	
72	8.6763	16	8.6768	16	1.3232	9.9995	28	
73	8.6779	16	8.6784	16	1.3216	9.9995	27	16
		16		16				1 1.6
74	8.6795		8.6800		1.3200	9.9995	26	2 3.2
75	8.6810	15	8.6815	15	1.3185	9.9995	25	3 4.8
76	8.6826	16	8.6831	16	1.3169	9.9995	24	4 6.4
		16		16				5 8.0
77	8.6842		8.6847		1.3153	9.9995	23	6 9.6
78	8.6858	16	8.6863	16	1.3137	9.9995	22	7 11.2
79	8.6873	15	8.6878	15	1.3122	9.9995	21	8 12.8
80	8.6889	16	8.6894	16	1.3106	9.9995	20	9 14.4
		15		15				
81	8.6904		8.6909		1.3091	9.9995	19	
82	8.6920	16	8.6925	16	1.3075	9.9995	18	
83	8.6935	15	8.6940	15	1.3060	9.9995	17	15
		15		16				1 1.5
84	8.6950		8.6956		1.3044	9.9995	16	2 3.0
85	8.6965	15	8.6971	15	1.3029	9.9995	15	3 4.5
86	8.6981	16	8.6986	15	1.3014	9.9995	14	4 6.0
		15		15				5 7.5
87	8.6996		8.7001		1.2999	9.9995	13	6 9.0
88	8.7011	15	8.7016	15	1.2984	9.9995	12	7 10.5
89	8.7026	15	8.7031	15	1.2969	9.9994	11	8 12.0
90	8.7041	15	8.7046	15	1.2954	9.9994	10	9 13.5
		15		15				
91	8.7056		8.7061		1.2939	9.9994	09	
92	8.7071	15	8.7076	15	1.2924	9.9994	08	14
93	8.7086	15	8.7091	15	1.2909	9.9994	07	1 1.4
		14		15				2 2.8
94	8.7100		8.7106		1.2894	9.9994	06	3 4.2
95	8.7115	15	8.7121	15	1.2879	9.9994	05	4 5.6
96	8.7130	15	8.7136	15	1.2864	9.9994	04	5 7.0
		14		14				6 8.4
97	8.7144		8.7150		1.2850	9.9994	03	7 9.8
98	8.7159	15	8.7165	15	1.2835	9.9994	02	8 11.2
99	8.7174	15	8.7179	14	1.2821	9.9994	01	9 12.6
100	8.7188	14	8.7194	15	1.2806	9.9994	00	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot	Lg. Cos.		P. P.
00	8.7188		8.7194		1.2806	9.9994	100	
		14		14				
01	8.7202		8.7208		1.2792	9.9994	99	
02	8.7217	15	8.7223	15	1.2777	9.9994	98	
03	8.7231	14	8.7237	14	1.2763	9.9994	97	
		14		15				
04	8.7245		8.7252		1.2748	9.9994	96	
05	8.7260	15	8.7266	14	1.2734	9.9994	95	
06	8.7274	14	8.7280	14	1.2720	9.9994	94	
		14		14				
07	8.7288		8.7294		1.2706	9.9994	93	
08	8.7302	14	8.7308	14	1.2692	9.9994	92	
09	8.7316	14	8.7323	15	1.2677	9.9994	91	
		14		14				
10	8.7330		8.7337		1.2663	9.9994	90	
		14		14				
11	8.7344		8.7351		1.2649	9.9994	89	
12	8.7358	14	8.7365	14	1.2635	9.9994	88	
13	8.7372	14	8.7379	14	1.2621	9.9994	87	
		14		13				
14	8.7386		8.7392		1.2608	9.9993	86	
15	8.7400	14	8.7406	14	1.2594	9.9993	85	
16	8.7413	13	8.7420	14	1.2580	9.9993	84	
		14		14				
17	8.7427		8.7434		1.2566	9.9993	83	
18	8.7441	14	8.7448	14	1.2552	9.9993	82	
19	8.7454	13	8.7461	13	1.2539	9.9993	81	
		14		14				
20	8.7468		8.7475		1.2525	9.9993	80	
		14		13				
21	8.7482		8.7488		1.2512	9.9993	79	
22	8.7495	13	8.7502	14	1.2498	9 9993	78	
23	8.7508	13	8.7515	13	1.2485	9.9993	77	
		14		14				
24	8.7522		8.7529		1.2471	9.9993	76	
25	8.7535	13	8.7542	13	1.2458	9.9993	75	
26	8.7549	14	8.7556	14	1.2444	9 9993	74	
		13		13				
27	8.7562		8.7569		1.2431	9.9993	73	
28	8.7575	13	8.7582	13	1.2418	9.9993	72	
29	8.7588	13	8.7596	14	1.2404	9 9993	71	
		14		13				
30	8.7602		8.7609		1.2391	9.9993	70	
		13		13				
31	8.7615		8.7622		1.2378	9.9993	69	
32	8.7628	13	8.7635	13	1.2365	9.9993	68	
33	8.7641	13	8.7648	13	1.2352	9.9993	67	
		13		13				
34	8.7654		8.7661		1.2339	9.9993	66	
35	8.7667	13	8.7674	13	1.2326	9.9993	65	
36	8.7680	13	8.7687	13	1.2313	9.9993	64	
		13		13				
37	8.7693		8.7700		1.2300	9.9992	63	
38	8.7705	12	8.7713	13	1.2287	9 9992	62	
39	8.7718	13	8.7726	13	1.2274	9.9992	61	
		13		13				
40	8.7731		8.7739		1.2261	9.9992	60	
		13		12				
41	8.7744		8.7751		1.2249	9.9992	59	
42	8.7756	12	8.7764	13	1.2236	9.9992	58	
43	8.7769	13	8.7777	13	1.2223	9.9992	57	
		13		13				
44	8.7782		8.7790		1.2210	9.9992	56	
45	8.7794	12	8.7802	12	1.2198	9.9992	55	
46	8.7807	13	8.7815	13	1.2185	9.9992	54	
		12		12				
47	8.7819		8.7827		1.2173	9.9992	53	
48	8.7832	13	8.7840	13	1.2160	9.9992	52	
49	8.7844	12	8.7852	12	1.2148	9.9992	51	
		13		13				
50	8.7857		8.7865		1.2135	9.9992	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

P. P.	
	15
1	1.5
2	3.0
3	4.5
4	6.0
5	7.5
6	9.0
7	10.5
8	12.0
9	13.5
	14
1	1.4
2	2.8
3	4.2
4	5.6
5	7.0
6	8.4
7	9.8
8	11.2
9	12.6
	13
1	1.3
2	2.6
3	3.9
4	5.2
5	6.5
6	7.8
7	9.1
8	10.4
9	11.7
	12
1	1.2
2	2.4
3	3.6
4	4.8
5	6.0
6	7.2
7	8.4
8	9.6
9	10.8

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.	
50	8.7857		8.7865		1.2135	9.9992	50		
		12		12					
51	8.7869		8.7877		1.2123	9.9992	49		
52	8.7881	12	8.7890	13	1.2110	9.9992	48		
53	8.7894	13	8.7902	12	1.2098	9.9992	47		13
		12		12				1	1.3
54	8.7906		8.7914		1.2086	9.9992	46	2	2.6
55	8.7918	12	8.7927	13	1.2073	9.9992	45	3	3.9
56	8.7930	12	8.7939	12	1.2061	9.9992	44	4	5.2
		13		12				5	6.5
57	8.7943		8.7951		1.2049	9.9992	43	6	7.8
58	8.7955	12	8.7963	12	1.2037	9.9992	42	7	9.1
59	8.7967	12	8.7975	12	1.2025	9.9991	41	8	10.4
		12		13				9	11.7
60	8.7979		8.7988		1.2012	9.9991	40		
		12		12					
61	8.7991		8.8000		1.2000	9.9991	39		
62	8.8003	12	8.8012	12	1.1988	9.9991	38		
63	8.8015	12	8.8024	12	1.1976	9.9991	37		
		12		12					
64	8.8027		8.8036		1.1964	9.9991	36		
65	8.8039	12	8.8048	12	1.1952	9.9991	35		12
66	8.8051	12	8.8059	11	1.1941	9.9991	34	1	1.2
		11		12				2	2.4
67	8.8062		8.8071		1.1929	9.9991	33	3	3.6
68	8.8074	12	8.8083	12	1.1917	9.9991	32	4	4.8
69	8.8086	12	8.8095	12	1.1905	9.9991	31	5	6.0
		12		12				6	7.2
70	8.8098		8.8107		1.1893	9.9991	30	7	8.4
		11		12				8	9.6
71	8.8109		8.8119		1.1881	9.9991	29	9	10.8
72	8.8121	12	8.8130	11	1.1870	9.9991	28		
73	8.8133	12	8.8142	12	1.1858	9.9991	27		
		11		12					
74	8.8144		8.8154		1.1846	9.9991	26		
75	8.8156	12	8.8165	11	1.1835	9.9991	25		
76	8.8168	12	8.8177	12	1.1823	9.9991	24		
		11		11					
77	8.8179		8.8188		1.1812	9.9991	23		11
78	8.8191	12	8.8200	12	1.1800	9.9991	22	1	1.1
79	8.8202	11	8.8212	12	1.1788	9.9990	21	2	2.2
		11		11				3	3.3
80	8.8213		8.8223		1.1777	9.9990	20	4	4.4
		12		11				5	5.5
81	8.8225		8.8234		1.1766	9.9990	19	6	6.6
82	8.8236	11	8.8246	12	1.1754	9.9990	18	7	7.7
83	8.8248	12	8.8257	11	1.1743	9.9990	17	8	8.8
		11		12				9	9.9
84	8.8259		8.8269		1.1731	9.9990	16		
85	8.8270	11	8.8280	11	1.1720	9.9990	15		
86	8.8281	11	8.8291	11	1.1709	9.9990	14		
		12		11					
87	8.8293		8.8302		1.1698	9.9990	13		
88	8.8304	11	8.8314	12	1.1686	9.9990	12		
89	8.8315	11	8.8325	11	1.1675	9.9990	11		
		11		11					10
90	8.8326		8.8336		1.1664	9.9990	10	1	1.0
		11		11				2	2.0
91	8.8337		8.8347		1.1653	9.9990	09	3	3.0
92	8.8348	11	8.8358	11	1.1642	9.9990	08	4	4.0
93	8.8359	11	8.8370	12	1.1630	9.9990	07	5	5.0
		11		11				6	6.0
94	8.8370		8.8381		1.1619	9.9990	06	7	7.0
95	8.8381	11	8.8392	11	1.1608	9.9990	05	8	8.0
96	8.8392	11	8.8403	11	1.1597	9.9990	04	9	9.0
		11		11					
97	8.8403		8.8414		1.1586	9.9990	03		
98	8.8414	11	8.8425	11	1.1575	9.9990	02		
99	8.8425	11	8.8436	11	1.1564	9.9989	01		
		11		10					
100	8.8436		8.8446		1.1554	9.9989	00		
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100		

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
00	8.8436		8.8446		1.1554	9.9989	100	
		11		11				
01	8.8447		8.8457		1.1543	9.9989	99	
		10		11				
02	8 8457		8.8468		1.1532	9.9989	98	
		11		11				
03	8.8468		8.8479		1.1521	9.9989	97	
		11		11				
04	8.8479		8.8490		1.1510	9.9989	96	
		11		11				
05	8.8490		8.8501		1.1499	9.9989	95	
		10		10				11
06	8.8500		8.8511		1.1489	9.9989	94	
		11		11				1 1.1
07	8.8511		8.8522		1.1478	9.9989	93	2 2.2
		11		11				
08	8.8522		8.8533		1.1467	9.9989	92	3 3.3
		10		10				
09	8.8532		8.8543		1.1457	9.9989	91	4 4.4
		11		11				
10	8.8543		8.8554		1.1446	9.9989	90	5 5.5
		10		11				6 6.6
11	8.8553		8.8565		1.1435	9.9989	89	
		11		10				7 7.7
12	8.8564		8.8575		1.1425	9.9989	88	8 8.8
		11		11				
13	8.8575		8.8586		1.1414	9.9989	87	9 9.9
		10		10				
14	8.8585		8.8596		1.1404	9.9989	86	
		10		11				
15	8.8595		8.8607		1.1393	9.9989	85	
		11		10				
16	8.8606		8.8617		1.1383	9.9989	84	
		10		11				
17	8.8616		8.8628		1.1372	9.9988	83	
		11		10				
18	8.8627		8.8638		1.1362	9.9988	82	
		10		11				
19	8.8637		8.8649		1.1351	9.9988	81	
		10		10				
20	8.8647		8.8659		1.1341	9.9988	80	
		11		10				
21	8.8658		8.8669		1.1331	9.9988	79	10
		10		11				
22	8.8668		8.8680		1.1320	9.9988	78	1 1.0
		10		10				
23	8.8678		8.8690		1.1310	9.9988	77	2 2.0
		10		10				
24	8.8688		8.8700		1.1300	9.9988	76	3 3.0
		11		11				
25	8.8699		8.8711		1.1289	9.9988	75	4 4.0
		10		10				
26	8.8709		8.8721		1.1279	9.9988	74	5 5.0
		10		10				6 6.0
27	8.8719		8.8731		1.1269	9.9988	73	7 7.0
		10		10				
28	8.8729		8.8741		1.1259	9.9988	72	8 8.0
		10		10				
29	8.8739		8.8751		1.1249	9.9988	71	9 9.0
		10		11				
30	8.8749		8.8762		1.1238	9.9988	70	
		10		10				
31	8.8759		8.8772		1.1228	9.9988	69	
		10		10				
32	8.8769		8.8782		1.1218	9.9988	68	
		11		10				
33	8.8780		8.8792		1.1208	9.9988	67	
		10		10				
34	8.8790		8.8802		1.1198	9.9988	66	
		9		10				
35	8.8799		8.8812		1.1188	9.9987	65	
		10		10				
36	8.8809		8.8822		1.1178	9.9987	64	
		10		10				
37	8.8819		8.8832		1.1168	9.9987	63	9
		10		10				
38	8.8829		8.8842		1.1158	9.9987	62	1 0.9
		10		10				2 1.8
39	8.8839		8.8852		1.1148	9.9987	61	3 2.7
		10		10				4 3.6
40	8.8849		8.8862		1.1138	9.9987	60	5 4.5
		10		10				6 5.4
41	8.8859		8.8872		1.1128	9.9987	59	7 6.3
		10		10				8 7.2
42	8.8869		8.8882		1.1118	9.9987	58	9 8.1
		9		9				
43	8.8878		8.8891		1.1109	9.9987	57	
		10		10				
44	8.8888		8.8901		1.1099	9.9987	56	
		10		10				
45	8.8898		8.8911		1.1089	9.9987	55	
		10		10				
46	8.8908		8.8921		1.1079	9.9987	54	
		9		10				
47	8.8917		8.8931		1.1069	9.9987	53	
		10		9				
48	8.8927		8.8940		1.1060	9.9987	52	
		10		10				
49	8.8937		8.8950		1.1050	9.9987	51	
		9		10				
50	8.8946		8.8960		1.1040	9.9987	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

‰	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.	
50	8.8946		8.8960		1.1040	9.9987	50		
		10		10					
51	8.8956		8.8970		1.1030	9.9987	49		
52	8.8966	10	8.8979	9	1.1021	9.9986	48		
53	8.8975	9	8.8989	10	1.1011	9.9986	47		
		10		9					
54	8.8985		8.8998		1.1002	9.9986	46		
55	8.8994	9	8.9008	10	1.0992	9.9986	45		10
56	8.9004	10	8.9018	10	1.0982	9.9986	44	1	1.0
		9		9					
57	8.9013		8.9027		1.0973	9.9986	43	2	2.0
58	8.9023	10	8.9037	10	1.0963	9.9986	42	3	3.0
59	8.9032	9	8.9046	9	1.0954	9.9986	41	4	4.0
		10		10				5	5.0
60	8.9042		8.9056		1.0944	9.9986	40	6	6.0
		9		9				7	7.0
61	8.9051		8.9065		1.0935	9.9986	39	8	8.0
62	8.9060	9	8.9075	10	1.0925	9.9986	38	9	9.0
63	8.9070	10	8.9084	9	1.0916	9.9986	37		
		9		9					
64	8.9079		8.9093		1.0907	9.9986	36		
65	8.9089	10	8.9103	10	1.0897	9.9986	35		
66	8.9098	9	8.9112	9	1.0888	9.9986	34		
		9		10					
67	8.9107		8.9122		1.0878	9.9986	33		
68	8.9116	9	8.9131	9	1.0869	9.9985	32		
69	8.9126	10	8.9140	9	1.0860	9.9985	31		
		9		10					
70	8.9135		8.9150		1.0850	9.9985	30		
		9		9					9
71	8.9144		8.9159		1.0841	9.9985	29	1	0.9
72	8.9153	9	8.9168	9	1.0832	9.9985	28	2	1.8
73	8.9162	9	8.9177	9	1.0823	9.9985	27	3	2.7
		10		9				4	3.6
74	8.9172		8.9186		1.0814	9.9985	26	5	4.5
75	8.9181	9	8.9196	10	1.0804	9.9985	25	6	5.4
76	8.9190	9	8.9205	9	1.0795	9.9985	24	7	6.3
		9		9				8	7.2
77	8.9199		8.9214		1.0786	9.9985	23	9	8.1
78	8.9208	9	8.9223	9	1.0777	9.9985	22		
79	8.9217	9	8.9232	9	1.0768	9.9985	21		
		9		9					
80	8.9226		8.9241		1.0759	9.9985	20		
		9		9					
81	8.9235		8.9250		1.0750	9.9985	19		
82	8.9244	9	8.9260	10	1.0740	9.9985	18		
83	8.9253	9	8.9269	9	1.0731	9.9985	17		
		9		9					
84	8.9262		8.9278		1.0722	9.9984	16		
85	8.9271	9	8.9287	9	1.0713	9.9984	15		
86	8.9280	9	8.9296	9	1.0704	9.9984	14		
		9		9					8
87	8.9289		8.9305		1.0695	9.9984	13	1	0.8
88	8.9298	9	8.9313	8	1.0687	9.9984	12	2	1.6
89	8.9307	9	8.9322	9	1.0678	9.9984	11	3	2.4
		8		9				4	3.2
90	8 9315		8.9331		1.0669	9 9984	10	5	4.0
		9		9				6	4.8
91	8.9324		8.9340		1.0660	9.9984	09	7	5.6
92	8.9333	9	8.9349	9	1.0651	9.9984	08	8	6.4
93	8.9342	9	8.9358	9	1.0642	9.9984	07	9	7.2
		9		9					
94	8.9351		8.9367		1.0633	9.9984	06		
95	8.9359	8	8.9376	9	1.0624	9.9984	05		
96	8.9368	9	8.9384	8	1.0616	9.9984	04		
		9		9					
97	8.9377		8.9393		1.0607	9.9984	03		
98	8.9386	9	8.9402	9	1.0598	9.9984	02		
99	8.9394	8	8.9411	9	1.0589	9.9984	01		
		9		9					
100	8.9403		8.9420		1.0580	9.9983	00		
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	‰		

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
00	8.9403		8.9420		1.0580	9.9983	100	
		9		8				
01	8.9412		8.9428		1.0572	9.9983	99	
		8		9				
02	8.9420		8.9437		1.0563	9.9983	98	
		9		9				
03	8.9429	8	8.9446	8	1.0554	9.9983	97	
04	8.9437		8.9454		1.0546	9.9983	96	
		9		9				
05	8.9446		8.9463		1.0537	9.9983	95	
		9		9				
06	8.9455	8	8.9472	8	1.0528	9.9983	94	
07	8.9463		8.9480		1.0520	9.9983	93	
		9		9				
08	8.9472	8	8.9489	8	1.0511	9.9983	92	
09	8.9480		8.9497		1.0503	9.9983	91	
		9		9				
10	8.9489	8	8.9506		1.0494	9.9983	90	
				9				9
11	8.9497		8.9515	8	1.0485	9.9983	89	1 0.9
		9						2 1.8
12	8.9506	8	8.9523		1.0477	9.9983	88	3 2.7
		9		9				4 3.6
13	8.9514	8	8.9532	8	1.0468	9.9983	87	5 4.5
14	8.9523		8.9540		1.0460	9.9983	86	6 5.4
		8		9				7 6.3
15	8.9531		8.9549		1.0451	9.9982	85	8 7.2
		8		8				9 8.1
16	8.9539	8	8.9557	8	1.0443	9.9982	84	
17	8.9548		8.9565		1.0435	9.9982	83	
		9		8				
18	8.9556	8	8.9574	9	1.0426	9.9982	82	
19	8.9565		8.9582		1.0418	9.9982	81	
		9		9				
20	8.9573	8	8.9591	8	1.0409	9.9982	80	
21	8.9581		8.9599		1.0401	9.9982	79	
		8		9				
22	8.9589		8.9608		1.0392	9.9982	78	
		9		8				
23	8.9598	8	8.9616	8	1.0384	9.9982	77	
24	8.9606		8.9624		1.0376	9.9982	76	
		8		9				
25	8.9614		8.9633		1.0367	9.9982	75	
		9		8				
26	8.9623	8	8.9641	8	1.0359	9.9982	74	
27	8.9631		8.9649		1.0351	9.9982	73	
		8		8				
28	8.9639		8.9657		1.0343	9.9982	72	
		8		9				
29	8.9647	8	8.9666	8	1.0334	9.9981	71	
30	8.9655		8.9674		1.0326	9.9981	70	
				8				8
31	8.9664	9	8.9682		1.0318	9.9981	69	1 0.8
		8		8				2 1.6
32	8.9672		8.9690		1.0310	9.9981	68	3 2.4
		8		9				4 3.2
33	8.9680	8	8.9699	8	1.0301	9.9981	67	5 4.0
34	8.9688		8.9707		1.0293	9.9981	66	6 4.8
		8		8				7 5.6
35	8.9696		8.9715		1.0285	9.9981	65	8 6.4
		8		8				9 7.2
36	8.9704	8	8.9723	8	1.0277	9.9981	64	
37	8.9712		8.9731		1.0269	9.9981	63	
		8		8				
38	8.9720		8.9739		1.0261	9.9981	62	
		8		8				
39	8.9728	8	8.9747	8	1.0253	9.9981	61	
40	8.9736		8.9756		1.0244	9.9981	60	
		8		9				
41	8.9744		8.9764	8	1.0236	9.9981	59	
		8		8				
42	8.9752		8.9772		1.0228	9.9981	58	
		8		8				
43	8.9760	8	8.9780	8	1.0220	9.9980	57	
44	8.9768		8.9788		1.0212	9.9980	56	
		8		8				
45	8.9776		8.9796		1.0204	9.9980	55	
		8		8				
46	8.9784	8	8.9804	8	1.0196	9.9980	54	
47	8.9792		8.9812		1.0188	9.9980	53	
		8		8				
48	8.9800		8.9820		1.0180	9.9980	52	
		8		8				
49	8.9808	8	8.9828	8	1.0172	9.9980	51	
50	8.9816		8.9836		1.0164	9.9980	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

′/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
50	8.9816		8.9836		1.0164	9.9980	50	
		8		8				
51	8.9824		8.9844		1.0156	9.9980	49	
52	8.9831	7	8.9852	8	1.0148	9.9980	48	
53	8.9839	8	8.9860	8	1.0140	9.9980	47	
		8		7				
54	8.9847		8.9867		1.0133	9.9980	46	
55	8.9855	8	8.9875	8	1.0125	9.9980	45	
56	8.9863	8	8.9883	8	1.0117	9.9980	44	
		7		8				
57	8.9870		8.9891		1.0109	9.9979	43	
58	8.9878	8	8.9899	8	1.0101	9.9979	42	
59	8.9886	8	8.9907	8	1.0093	9.9979	41	
		8		8				
60	8.9894		8.9915		1.0085	9.9979	40	
61	8.9901	7	8.9922	7	1.0078	9.9979	39	
62	8.9909	8	8.9930	8	1.0070	9.9979	38	
63	8.9917	8	8.9938	8	1.0062	9.9979	37	
		8		8				
64	8.9925		8.9946		1.0054	9.9979	36	
65	8.9932	7	8.9953	7	1.0047	9.9979	35	
66	8.9940	8	8.9961	8	1.0039	9.9979	34	
		8		8				
67	8.9948		8.9969		1.0031	9.9979	33	
68	8.9955	7	8.9977	8	1.0023	9.9979	32	
69	8.9963	8	8.9984	7	1.0016	9.9979	31	
		7		8				
70	8.9970		8.9992		1.0008	9.9978	30	
71	8.9978	8	9.0000	8	1.0000	9.9978	29	
72	8.9986	8	9.0007	7	0.9993	9.9978	28	
73	8.9993	7	9.0015	8	0.9985	9.9978	27	
		8		7				
74	9.0001		9.0022		0.9978	9.9978	26	
75	9.0008	7	9.0030	8	0.9970	9.9978	25	
76	9.0016	8	9.0038	8	0.9962	9.9978	24	
		7		7				
77	9.0023		9.0045		0.9955	9.9978	23	
78	9.0031	8	9.0053	8	0.9947	9.9978	22	
79	9.0038	7	9.0060	7	0.9940	9.9978	21	
		8		8				
80	9.0046		9.0068		0.9932	9.9978	20	
81	9.0053	7	9.0075	7	0.9925	9.9978	19	
82	9.0061	8	9.0083	8	0.9917	9.9978	18	
83	9.0068	7	9.0090	7	0.9910	9.9977	17	
		7		8				
84	9.0075		9.0098		0.9902	9.9977	16	
85	9.0083	8	9.0105	7	0.9895	9.9977	15	
86	9.0090	7	9.0113	8	0.9887	9.9977	14	
		8		7				
87	9.0098		9.0120		0.9880	9.9977	13	
88	9.0105	7	9.0128	8	0.9872	9.9977	12	
89	9.0112	7	9.0135	7	0.9865	9.9977	11	
		8		8				
90	9.0120		9.0143		0.9857	9.9977	10	
91	9.0127	7	9.0150	7	0.9850	9.9977	09	
92	9.0134	7	9.0157	7	0.9843	9.9977	08	
93	9.0142	8	9.0165	8	0.9835	9.9977	07	
		7		7				
94	9.0149		9.0172		0.9828	9.9977	06	
95	9.0156	7	9.0180	8	0.9820	9.9977	05	
96	9.0163	7	9.0187	7	0.9813	9.9976	04	
		8		7				
97	9.0171		9.0194		0.9806	9.9976	03	
98	9.0178	7	9.0202	8	0.9798	9.9976	02	
99	9.0185	7	9.0209	7	0.9791	9.9976	01	
100	9.0192	7	9.0216	7	0.9784	9.9976	00	

	8
1	0.8
2	1.6
3	2.4
4	3.2
5	4.0
6	4.8
7	5.6
8	6.4
9	7.2

	7
1	0.7
2	1.4
3	2.1
4	2.8
5	3.5
6	4.2
7	4.9
8	5.6
9	6.3

	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	′/100	

′/00	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
00	9.0192	8	9.0216	7	0.9784	9.9976	100	
01	9.0200		9.0223		0.9777	9.9976	99	
02	9.0207	7	9.0231	8	0.9769	9.9976	98	
03	9.0214	7	9.0238	7	0.9762	9.9976	97	
04	9.0221	7	9.0245	7	0.9755	9.9976	96	
05	9.0228	7	9.0253	8	0.9747	9.9976	95	
06	9.0235	7	9.0260	7	0.9740	9.9976	94	8
07	9.0243	8	9.0267	7	0.9733	9.9976	93	1 0.8
08	9.0250	7	9.0274	7	0.9726	9.9976	92	2 1.6
09	9.0257	7	9.0281	7	0.9719	9.9975	91	3 2.4
10	9.0264	7	9.0289	8	0.9711	9.9975	90	4 3.2
11	9.0271	7	9.0296	7	0.9704	9.9975	89	5 4.0
12	9.0278	7	9.0303	7	0.9697	9.9975	88	6 4.8
13	9.0285	7	9.0310	7	0.9690	9.9975	87	7 5.6
14	9.0292	7	9.0317	7	0.9683	9.9975	86	8 6.4
15	9.0299	7	9.0324	7	0.9676	9.9975	85	9 7.2
16	9.0306	7	9.0331	7	0.9669	9.9975	84	
17	9.0313	7	9.0338	7	0.9662	9.9975	83	
18	9.0320	7	9.0346	8	0.9654	9.9975	82	
19	9.0327	7	9.0353	7	0.9647	9.9975	81	
20	9.0334	7	9.0360	7	0.9640	9.9975	80	
21	9.0341	7	9.0367	7	0.9633	9.9974	79	7
22	9.0348	7	9.0374	7	0.9626	9.9974	78	1 0.7
23	9.0355	7	9.0381	7	0.9619	9.9974	77	2 1.4
24	9.0362	7	9.0388	7	0.9612	9.9974	76	3 2.1
25	9.0369	7	9.0395	7	0.9605	9.9974	75	4 2.8
26	9.0376	7	9.0402	7	0.9598	9.9974	74	5 3.5
27	9.0383	7	9.0409	7	0.9591	9.9974	73	6 4.2
28	9.0390	7	9.0416	7	0.9584	9.9974	72	7 4.9
29	9.0397	7	9.0423	7	0.9577	9.9974	71	8 5.6
30	9.0403	6	9.0430	7	0.9570	9.9974	70	9 6.3
31	9.0410	7	9.0437	7	0 9563	9.9974	69	
32	9.0417	7	9.0444	7	0.9556	9.9974	68	
33	9.0424	7	9.0451	7	0.9549	9.9973	67	
34	9.0431	7	9.0457	6	0.9543	9.9973	66	
35	9.0438	7	9.0464	7	0.9536	9.9973	65	
36	9.0444	6	9.0471	7	0.9529	9.9973	64	6
37	9.0451	7	9.0478	7	0.9522	9.9973	63	1 0.6
38	9.0458	7	9.0485	7	0.9515	9.9973	62	2 1.2
39	9.0465	7	9.0492	7	0.9508	9.9973	61	3 1.8
40	9.0472	7	9.0499	7	0.9501	9 9973	60	4 2.4
41	9.0478	6	9.0506	7	0.9494	9.9973	59	5 3.0
42	9.0485	7	9.0512	6	0.9488	9.9973	58	6 3.6
43	9.0492	7	9.0519	7	0.9481	9.9973	57	7 4.2
44	9.0498	6	9.0526	7	0.9474	9.9973	56	8 4.8
45	9.0505	7	9.0533	6	0.9467	9.9972	55	9 5.4
46	9.0512	7	9.0540	7	0.9460	9.9972	54	
47	9.0519	7	9.0546	6	0.9454	9.9972	53	
48	9.0525	6	9.0553	7	0.9447	9.9972	52	
49	9.0532	7	9 0560	7	0.9440	9.9972	51	
50	9.0539	7	9.0567	7	0.9433	9.9972	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	′/00	

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
50	9.0539	6	9.0567	6	0.9433	9.9972	50	
51	9.0545	7	9.0573	7	0.9427	9.9972	49	
52	9.0552	6	9.0580	7	0.9420	9.9972	48	
53	9.0558	7	9.0587	6	0.9413	9.9972	47	
54	9.0565	7	9.0593	7	0.9407	9.9972	46	
55	9.0572	6	9.0600	7	0.9400	9.9972	45	
56	9.0578	7	9.0607	7	0.9393	9.9971	44	
57	9.0585	6	9.0614	6	0.9386	9.9971	43	
58	9.0591	7	9.0620	7	0.9380	9.9971	42	
59	9.0598	7	9.0627	6	0.9373	9.9971	41	
60	9.0605	6	9 0633	7	0.9367	9.9971	40	
61	9.0611	7	9.0640	7	0.9360	9.9971	39	
62	9.0618	6	9.0647	6	0.9353	9.9971	38	
63	9.0624	7	9.0653	7	0.9347	9.9971	37	
64	9.0631	6	9.0660	7	0.9340	9.9971	36	
65	9.0637	7	9.0667	6	0.9333	9.9971	35	
66	9.0644	6	9.0673	7	0.9327	9.9971	34	
67	9.0650	7	9.0680	6	0.9320	9.9971	33	
68	9.0657	6	9.0686	7	0.9314	9.9970	32	
69	9.0663	7	9.0693	6	0.9307	9.9970	31	
70	9.0670	6	9.0699	7	0.9301	9.9970	30	
71	9.0676	7	9.0706	6	0.9294	9.9970	29	
72	9.0683	6	9.0712	6	0.9288	9.9970	28	
73	9.0689	6	9.0719	6	0.9281	9.9970	27	
74	9.0695	7	9.0725	7	0.9275	9.9970	26	
75	9.0702	6	9.0732	6	0.9268	9.9970	25	
76	9.0708	7	9.0738	7	0.9262	9.9970	24	
77	9.0715	6	9.0745	6	0.9255	9.9970	23	
78	9.0721	6	9.0751	7	0.9249	9.9970	22	
79	9.0727	7	9.0758	6	0.9242	9.9969	21	
80	9.0734	6	9.0764	7	0.9236	9.9969	20	
81	9.0740	6	9.0771	6	0.9229	9.9969	19	
82	9.0746	7	9.0777	7	0.9223	9.9969	18	
83	9.0753	6	9.0784	6	0.9216	9.9969	17	
84	9.0759	6	9.0790	6	0.9210	9.9969	16	
85	9.0765	7	9.0796	7	0.9204	9.9969	15	
86	9.0772	6	9.0803	6	0.9197	9.9969	14	
87	9.0778	6	9.0809	7	0.9191	9.9969	13	
88	9.0784	6	9.0816	6	0.9184	9.9969	12	
89	9.0790	7	9.0822	6	0.9178	9.9969	11	
90	9.0797	6	9.0828	7	0.9172	9.9968	10	
91	9.0803	6	9.0835	6	0.9165	9.9968	09	
92	9.0809	7	9.0841	6	0.9159	9.9968	08	
93	9.0816	6	9.0847	7	0.9153	9.9968	07	
94	9.0822	6	9.0854	6	0.9146	9.9968	06	
95	9.0828	6	9.0860	6	0.9140	9.9968	05	
96	9.0834	6	9.0866	7	0.9134	9.9968	04	
97	9.0840	7	9.0873	6	0.9127	9.9968	03	
98	9.0847	6	9.0879	6	0.9121	9.9968	02	
99	9.0853	6	9.0885	6	0.9115	9.9968	01	
100	9.0859		9.0891		0.9109	9.9968	00	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	P. P.

	7
1	0.7
2	1.4
3	2.1
4	2.8
5	3.5
6	4.2
7	4.9
8	5.6
9	6.3

	6
1	0.6
2	1.2
3	1.8
4	2.4
5	3.0
6	3.6
7	4.2
8	4.8
9	5.4

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
00	9.0859	6	9.0891	7	0.9109	9.9968	100	
01	9.0865	6	9.0898	6	0.9102	9.9967	99	
02	9.0871	6	9.0904	6	0.9096	9.9967	98	
03	9.0877	7	9.0910	6	0.9090	9.9967	97	
04	9.0884	6	9.0916	7	0.9084	9.9967	96	
05	9.0890	6	9.0923	6	0.9077	9.9967	95	
06	9.0896	6	9.0929	6	0.9071	9.9967	94	7
07	9.0902	6	9.0935	6	0.9065	9.9967	93	1 0.7
08	9.0908	6	9.0941	6	0.9059	9.9967	92	2 1.4
09	9.0914	6	9.0947	7	0.9053	9.9967	91	3 2.1
10	9.0920	6	9.0954	6	0.9046	9.9967	90	4 2.8
11	9.0926	6	9.0960	6	0.9040	9.9966	89	5 3.5
12	9.0932	6	9.0966	6	0.9034	9.9966	88	6 4.2
13	9.0938	7	9.0972	6	0.9028	9.9966	87	7 4.9
14	9.0945	6	9.0978	6	0.9022	9.9966	86	8 5.6
15	9.0951	6	9.0984	6	0.9016	9.9966	85	9 6.3
16	9.0957	6	9.0991	7	0.9009	9.9966	84	
17	9.0963	6	9.0997	6	0.9003	9.9966	83	
18	9.0969	6	9.1003	6	0.8997	9.9966	82	
19	9.0975	6	9.1009	6	0.8991	9.9966	81	
20	9.0981	6	9.1015	6	0.8985	9.9966	80	
21	9.0987	6	9.1021	6	0.8979	9.9966	79	6
22	9.0993	6	9.1027	6	0.8973	9.9965	78	1 0.6
23	9.0999	6	9.1033	6	0.8967	9.9965	77	2 1.2
24	9 1005	6	9.1039	6	0.8961	9.9965	76	3 1.8
25	9.1011	6	9.1045	6	0.8955	9.9965	75	4 2 4
26	9.1017	5	9.1051	7	0.8949	9.9965	74	5 3 0
27	9.1022	6	9.1058	6	0.8942	9.9965	73	6 3.6
28	9.1028	6	9.1064	6	0.8936	9.9965	72	7 4.2
29	9.1034	6	9.1070	6	0.8930	9.9965	71	8 4.8
30	9.1040	6	9.1076	6	0.8924	9.9965	70	9 5.4
31	9.1046	6	9.1082	6	0.8918	9.9965	69	
32	9.1052	6	9.1088	6	0.8912	9.9964	68	
33	9.1058	6	9.1094	6	0.8906	9.9964	67	
34	9.1064	6	9.1100	6	0.8900	9.9964	66	
35	9.1070	6	9.1106	6	0.8894	9.9964	65	
36	9.1076	5	9.1112	5	0.8888	9.9964	64	5
37	9.1081	6	9.1117	6	0.8883	9.9964	63	1 0 5
38	9.1087	6	9.1123	6	0.8877	9.9964	62	2 1.0
39	9.1093	6	9.1129	6	0.8871	9.9964	61	3 1.5
40	9.1099	6	9.1135	6	0.8865	9.9964	60	4 2.0
41	9.1105	6	9.1141	6	0.8859	9.9964	59	5 2.5
42	9.1111	5	9.1147	6	0.8853	9.9963	58	6 3.0
43	9.1116	6	9.1153	6	0.8847	9.9963	57	7 3.5
44	9.1122	6	9.1159	6	0.8841	9.9963	56	8 4.0
45	9.1128	6	9.1165	6	0.8835	9.9963	55	9 4.5
46	9.1134	6	9.1171	6	0.8829	9.9963	54	
47	9.1140	5	9.1177	6	0.8823	9.9963	53	
48	9.1145	6	9.1183	5	0.8817	9.9963	52	
49	9.1151	6	9.1188	6	0.8812	9.9963	51	
50	9.1157		9.1194		0 8806	9.9963	50	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

1/100	Lg. Sin.	d.	Lg. Tang.	d. c.	Lg. Cot.	Lg. Cos.		P. P.
50	9.1157	6	9.1194	6	0.8806	9.9963	50	
51	9.1163	5	9.1200	6	0.8800	9.9963	49	
52	9.1168	6	9.1206	6	0.8794	9.9962	48	
53	9.1174	6	9.1212	6	0.8788	9.9962	47	
54	9.1180	6	9.1218	5	0.8782	9.9962	46	
55	9.1186	5	9.1223	6	0.8777	9.9962	45	
56	9.1191	6	9.1229	6	0.8771	9.9962	44	
57	9.1197	6	9.1235	6	0.8765	9.9962	43	
58	9.1203	5	9.1241	6	0.8759	9.9962	42	
59	9.1208	6	9.1247	5	0.8753	9.9962	41	
60	9.1214	6	9.1252	6	0.8748	9.9962	40	
61	9.1220	6	9.1258	6	0.8742	9.9962	39	
62	9.1226	5	9.1264	6	0.8736	9.9961	38	
63	9.1231	6	9.1270	6	0.8730	9.9961	37	
64	9.1237	5	9.1276	5	0.8724	9.9961	36	
65	9.1242	6	9.1281	6	0.8719	9.9961	35	
66	9.1248	6	9.1287	6	0.8713	9.9961	34	
67	9.1254	5	9.1293	6	0.8707	9.9961	33	
68	9.1259	6	9.1299	5	0.8701	9.9961	32	
69	9.1265	6	9.1304	6	0.8696	9.9961	31	
70	9.1271	5	9.1310	6	0.8690	9.9961	30	
71	9.1276	6	9.1316	5	0.8684	9.9961	29	
72	9.1282	5	9.1321	6	0.8679	9.9960	28	
73	9.1287	6	9.1327	6	0.8673	9.9960	27	
74	9.1293	6	9.1333	5	0.8667	9.9960	26	
75	9.1299	5	9.1338	6	0.8662	9 9960	25	
76	9.1304	6	9.1344	6	0.8656	9.9960	24	
77	9.1310	5	9.1350	5	0.8650	9.9960	23	
78	9.1315	6	9.1355	6	0.8645	9.9960	22	
79	9.1321	5	9.1361	6	0.8639	9.9960	21	
80	9.1326	6	9.1367	5	0.8633	9.9960	20	
81	9.1332	5	9.1372	6	0.8628	9.9960	19	
82	9.1337	6	9.1378	6	0.8622	9.9959	18	
83	9.1343	5	9.1384	5	0.8616	9.9959	17	
84	9.1348	6	9.1389	6	0.8611	9.9959	16	
85	9.1354	5	9.1395	5	0.8605	9.9959	15	
86	9.1359	6	9.1400	6	0.8600	9.9959	14	
87	9.1365	5	9.1406	6	0.8594	9.9959	13	
88	9.1370	6	9.1412	5	0.8588	9.9959	12	
89	9.1376	5	9.1417	6	0.8583	9.9959	11	
90	9.1381	6	9.1423	5	0.8577	9.9959	10	
91	9.1387	5	9.1428	6	0.8572	9.9958	09	
92	9.1392	6	9.1434	5	0.8566	9.9958	08	
93	9.1398	5	9.1439	6	0.8561	9.9958	07	
94	9.1403	6	9.1445	5	0.8555	9.9958	06	
95	9.1409	5	9.1450	6	0.8550	9.9958	05	
96	9.1414	5	9.1456	5	0.8544	9.9958	04	
97	9.1419	6	9.1461	6	0.8539	9.9958	03	
98	9.1425	5	9.1467	6	0.8533	9.9958	02	
99	9.1430	6	9.1473	5	0.8527	9.9958	01	
100	9.1436		9.1478		0.8522	9.9958	00	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tang.	Lg. Sin.	1/100	

	6
1	0.6
2	1.2
3	1.8
4	2.4
5	3.0
6	3.6
7	4.2
8	4.8
9	5.4

	5
1	0.5
2	1.0
3	1.5
4	2 0
5	2.5
6	3.0
7	3.5
8	4.0
9	4.5

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.			
5.0	8.9403	86	8.9420	86	1.0580	9.9983	0	85.0		62	61	60
1	8.9489	84	8.9506	85	1.0494	9.9983	1	9	1	6.2	6.1	6.0
2	8.9573	82	8.9591	83	1.0409	9.9982	1	8	2	12.4	12.2	12.0
3	8.9655	81	8.9674	82	1.0326	9.9981	1	7	3	18.6	18.3	18.0
4	8.9736	80	8.9756	80	1.0244	9.9981	0	6	4	24.8	24.4	24.0
5	8.9816	78	8.9836	79	1.0164	9.9980	1	5	5	31.0	30.5	30.0
6	8.9894	76	8.9915	77	1.0085	9.9979	1	4	6	37.2	36.6	36.0
7	8.9970	76	8.9992	76	1.0008	9.9978	1	3	7	43.4	42.7	42.0
8	9.0046	74	9.0068	75	0.9932	9.9978	0	2	8	49.6	48.8	48.0
9	9.0120	72	9.0143	73	0.9857	9.9977	1	1	9	55.8	54.9	54.0
6.0	9.0192	72	9.0216	73	0.9784	9.9976	1	84.0		59	58	57
1	9.0264	70	9.0289	71	0.9711	9.9975	1	9	1	5.9	5.8	5.7
2	9.0334	69	9.0360	70	0.9640	9.9975	0	8	2	11.8	11.6	11.4
3	9.0403	69	9.0430	69	0.9570	9.9974	1	7	3	17.7	17.4	17.1
4	9.0472	67	9.0499	68	0.9501	9.9973	1	6	4	23.6	23.2	22.8
5	9.0539	66	9.0567	66	0.9433	9.9972	1	5	5	29.5	29.0	28.5
6	9.0605	65	9.0633	66	0.9367	9.9971	1	4	6	35.4	34.8	34.2
7	9.0670	64	9.0699	65	0.9301	9.9970	1	3	7	41.3	40.6	39.9
8	9.0734	63	9.0764	64	0.9236	9.9969	1	2	8	47.2	46.4	45.6
9	9.0797	62	9.0828	63	0.9172	9.9968	1	1	9	53.1	52.2	51.3
7.0	9.0859	61	9.0891	63	0.9109	9.9968	0	83.0		56	55	54
1	9.0920	61	9.0954	61	0.9046	9.9967	1	9	1	5.6	5.5	5.4
2	9.0981	59	9.1015	61	0.8985	9.9966	1	8	2	11.2	11.0	10.8
3	9.1040	59	9.1076	59	0.8924	9.9965	1	7	3	16.8	16.5	16.2
4	9.1099	58	9.1135	59	0.8865	9.9964	1	6	4	22.4	22.0	21.6
5	9.1157	57	9.1194	58	0.8806	9.9963	1	5	5	28.0	27.5	27.0
6	9.1214	57	9.1252	58	0.8748	9.9962	1	4	6	33.6	33.0	32.4
7	9.1271	55	9.1310	57	0.8690	9.9961	1	3	7	39.2	38.5	37.8
8	9.1326	55	9.1367	56	0.8633	9.9960	1	2	8	44.8	44.0	43.2
9	9.1381	55	9.1423	55	0.8577	9.9959	1	1	9	50.4	49.5	48.6
8.0	9.1436	53	9.1478	55	0.8522	9.9958	2	82.0		53	52	51
1	9.1489	53	9.1533	54	0.8467	9.9956	1	9	1	5.3	5.2	5.1
2	9.1542	52	9.1587	53	0.8413	9.9955	1	8	2	10.6	10.4	10.2
3	9.1594	52	9.1640	53	0.8360	9.9954	1	7	3	15.9	15.6	15.3
4	9.1646	51	9.1693	52	0.8307	9.9953	1	6	4	21.2	20.8	20.4
5	9.1697	50	9.1745	52	0.8255	9.9952	1	5	5	26.5	26.0	25.5
6	9.1747	50	9.1797	51	0.8203	9.9951	1	4	6	31.8	31.2	30.6
7	9.1797	50	9.1848	50	0.8152	9.9950	1	3	7	37.1	36.4	35.7
8	9.1847	48	9.1898	50	0.8102	9.9949	2	2	8	42.4	41.6	40.8
9	9.1895	48	9.1948	50	0 8052	9.9947	1	1	9	47.7	46.8	45.9
9.0	9.1943	48	9.1997	49	0.8003	9.9946	1	81.0		50	49	48
1	9.1991	47	9.2046	49	0.7954	9.9945	1	9	1	5.0	4.9	4.8
2	9.2038	47	9.2094	48	0.7906	9.9944	1	8	2	10.0	9.8	9.6
3	9.2085	46	9.2142	48	0.7858	9.9943	2	7	3	15.0	14.7	14.4
4	9.2131	45	9.2189	47	0.7811	9.9941	1	6	4	20.0	19.6	19.2
5	9.2176	45	9.2236	46	0.7764	9.9940	1	5	5	25.0	24.5	24.0
6	9.2221	45	9.2282	46	0.7718	9.9939	2	4	6	30.0	29.4	28.8
7	9.2266	44	9.2328	46	0.7672	9.9937	1	3	7	35.0	34.3	33.6
8	9.2310	43	9.2374	45	0.7626	9.9936	1	2	8	40.0	39.2	38.4
9	9.2353	44	9.2419	44	0.7581	9.9935	1	1	9	45.0	44.1	43.2
10.0	9.2397		9.2463		0.7537	9.9934		80.0				
	Lg. Cos.	d.	Cot. Lg.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade				

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.		
10.0	9.2397	42	9.2463	44	0.7537	9.9934	2	80.0		41	40
1	9.2439	43	9.2507	44	0.7493	9.9932	1	9	1	4.1	4.0
2	9.2482	42	9.2551	43	0.7449	9.9931	2	8	2	8.2	8.0
3	9.2524	41	9.2594	43	0.7406	9.9929	1	7	3	12.3	12.0
4	9.2565	41	9.2637	43	0.7363	9.9928	1	6	4	16.4	16.0
5	9.2606	41	9.2680	42	0.7320	9.9927	2	5	5	20.5	20.0
6	9.2647	40	9.2722	42	0.7278	9.9925	1	4	6	24.6	24.0
7	9.2687	40	9.2764	41	0.7236	9.9924	2	3	7	28.7	28.0
8	9.2727	40	9.2805	41	0.7195	9.9922	1	2	8	32.8	32.0
9	9.2767	39	9.2846	41	0.7154	9.9921	2	1	9	36.9	36.0
11.0	9.2806	39	9.2887	40	0.7113	9.9919	1	79.0		39	38
1	9.2845	38	9.2927	40	0.7073	9.9918	2	9	1	3.9	3.8
2	9.2883	38	9.2967	39	0.7033	9 9916	1	8	2	7.8	7.6
3	9.2921	38	9.3006	40	0.6994	9.9915	2	7	3	11.7	11.4
4	9 2959	38	9.3046	39	0.6954	9.9913	1	6	4	15.6	15.2
5	9.2997	37	9.3085	38	0.6915	9.9912	2	5	5	19.5	19.0
6	9.3034	36	9.3123	39	0.6877	9.9910	1	4	6	23.4	22.8
7	9.3070	37	9.3162	38	0.6838	9.9909	2	3	7	27.3	26.6
8	9.3107	36	9.3200	37	0.6800	9.9907	1	2	8	31.2	30.4
9	9.3143	36	9.3237	38	0.6763	9.9906	2	1	9	35.1	34.2
12.0	9.3179	35	9.3275	37	0.6725	9.9904	2	78.0		37	36
1	9.3214	36	9.3312	37	0.6688	9.9902	1	9	1	3.7	3.6
2	9.3250	34	9.3349	36	0.6651	9.9901	2	8	2	7.4	7.2
3	9.3284	35	9.3385	37	0.6615	9.9899	2	7	3	11.1	10.8
4	9.3319	34	9.3422	36	0.6578	9.9897	1	6	4	14.8	14.4
5	9.3353	34	9.3458	35	0.6542	9.9896	2	5	5	18.5	18.0
6	9.3387	34	9.3493	36	0.6507	9.9894	2	4	6	22.2	21.6
7	9.3421	34	9.3529	35	0.6471	9.9892	1	3	7	25.9	25.2
8	9.3455	34	9.3564	35	0.6436	9.9891	2	2	8	29.6	28.8
9	9.3488	33	9.3599	35	0.6401	9.9889	2	1	9	33.3	32.4
13.0	9.3521	33	9.3634	34	0.6366	9.9887	2	77.0		35	34
1	9.3554	33	9.3668	34	0.6332	9.9885	2	9	1	3.5	3.4
2	9.3586	32	9.3702	34	0.6298	9.9884	1	8	2	7.0	6.8
3	9.3618	32	9.3736	34	0.6264	9.9882	2	7	3	10.5	10.2
4	9.3650	32	9.3770	34	0.6230	9.9880	2	6	4	14.0	13.6
5	9.3682	31	9.3804	34	0.6196	9.9878	2	5	5	17.5	17.0
6	9.3713	32	9.3837	33	0.6163	9.9876	2	4	6	21.0	20.4
7	9.3745	30	9.3870	33	0.6130	9.9875	1	3	7	24.5	23.8
8	9.3775	31	9.3903	32	0.6097	9.9873	2	2	8	28.0	27.2
9	9.3806	31	9.3935	33	0.6065	9.9871	2	1	9	31.5	30.6
14.0	9.3837	30	9.3968	32	0.6032	9.9869	2	76.0		33	32
1	9.3867	30	9.4000	32	0.6000	9.9867	2	9	1	3.3	3.2
2	9.3897	30	9.4032	32	0.5968	9.9865	2	8	2	6.6	6.4
3	9.3927	30	9.4064	31	0.5936	9.9863	2	7	3	9.9	9.6
4	9.3957	29	9.4095	32	0.5905	9.9861	2	6	4	13.2	12.8
5	9.3986	29	9.4127	31	0.5873	9.9859	2	5	5	16.5	16.0
6	9.4015	29	9.4158	31	0.5842	9.9857	2	4	6	19.8	19.2
7	9.4044	29	9.4189	31	0.5811	9.9855	2	3	7	23.1	22.4
8	9.4073	29	9.4220	30	0.5780	9.9853	2	2	8	26.4	25.6
9	9.4102	28	9.4250	31	0.5750	9.9851	2	1	9	29.7	28.8
15.0	9.4130		9.4281		0.5719	9.9849		75.0			
	Lg Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade			

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.
15.0	9.4130	28	9.4281	30	0.5719	9.9849	2	75.0	
1	9.4158	28	9.4311	30	0.5689	9.9847	2	9	30 | 29
2	9.4186	28	9.4341	30	0.5659	9.9845	2	8	1 | 3.0 | 2.9
3	9.4214	28	9.4371	29	0.5629	9.9843	2	7	2 | 6.0 | 5.8
4	9.4242	27	9.4400	30	0.5600	9.9841	2	6	3 | 9.0 | 8.7
5	9.4269	27	9.4430	29	0.5570	9.9839	2	5	4 | 12.0 | 11.6
6	9.4296	27	9.4459	29	0.5541	9.9837	2	4	5 | 15.0 | 14.5
7	9.4323	27	9.4488	29	0.5512	9.9835	2	3	6 | 18.0 | 17.4
8	9.4350	27	9.4517	29	0.5483	9.9833	2	2	7 | 21.0 | 20.3
9	9.4377	26	9.4546	29	0.5454	9.9831	2	1	8 | 24.0 | 23.2
16.0	9.4403	27	9.4575	28	0.5425	9.9828	3	74.0	9 | 27.0 | 26.1
1	9.4430	26	9.4603	29	0.5397	9.9826	2	9	28 | 27
2	9.4456	26	9.4632	28	0.5368	9.9824	2	8	1 | 2.8 | 2.7
3	9.4482	26	9.4660	28	0.5340	9.9822	2	7	2 | 5.6 | 5.4
4	9.4508	25	9.4688	28	0.5312	9.9820	2	6	3 | 8.4 | 8.1
5	9.4533	26	9.4716	28	0.5284	9.9817	3	5	4 | 11.2 | 10.8
6	9.4559	25	9.4744	27	0.5256	9.9815	2	4	5 | 14.0 | 13.5
7	9.4584	25	9.4771	28	0.5229	9.9813	2	3	6 | 16.8 | 16.2
8	9.4609	25	9.4799	27	0.5201	9.9811	3	2	7 | 19.6 | 18.9
9	9.4634	25	9.4826	27	0.5174	9.9808	2	1	8 | 22.4 | 21.6
17.0	9.4659	25	9.4853	27	0.5147	9.9806	2	73.0	9 | 25.2 | 24.3
1	9.4684	25	9.4880	27	0.5120	9.9804	3	9	26 | 25
2	9.4709	24	9.4907	27	0.5093	9.9801	2	8	1 | 2.6 | 2.5
3	9.4733	24	9.4934	27	0.5066	9.9799	2	7	2 | 5.2 | 5.0
4	9.4757	24	9.4961	26	0.5039	9.9797	3	6	3 | 7.8 | 7.5
5	9.4781	24	9.4987	27	0.5013	9.9794	2	5	4 | 10.4 | 10.0
6	9.4805	24	9.5014	26	0.4986	9.9792	3	4	5 | 13.0 | 12.5
7	9.4829	24	9.5040	26	0.4960	9.9789	3	3	6 | 15.6 | 15.0
8	9.4853	24	9.5066	26	0.4934	9.9787	2	2	7 | 18.2 | 17.5
9	9.4876	23	9.5092	26	0.4908	9.9785	2	1	8 | 20.8 | 20.0
18.0	9.4900	24	9.5118	25	0.4882	9.9782	3	72.0	9 | 23.4 | 22.5
1	9.4923	23	9.5143	26	0.4857	9.9780	2	9	24
2	9.4946	23	9.5169	26	0.4831	9.9777	3	8	1 | 2.4
3	9.4969	23	9.5195	26	0.4805	9.9775	2	7	2 | 4.8
4	9.4992	23	9.5220	25	0.4780	9.9772	3	6	3 | 7.2
5	9.5015	22	9.5245	25	0.4755	9.9770	2	5	4 | 9.6
6	9.5037	23	9.5270	25	0.4730	9.9767	3	4	5 | 12.0
7	9.5060	22	9.5295	25	0.4705	9.9764	3	3	6 | 14.4
8	9.5082	22	9.5320	25	0.4680	9.9762	2	2	7 | 16.8
9	9.5104	22	9.5345	25	0.4655	9.9759	3	1	8 | 19.2
19.0	9.5126	22	9.5370	24	0.4630	9.9757	2	71.0	9 | 21.6
1	9.5148	22	9.5394	25	0.4606	9.9754	3	9	23 | 22
2	9.5170	22	9.5419	24	0.4581	9.9751	3	8	1 | 2.3 | 2.2
3	9.5192	21	9.5443	24	0.4557	9.9749	2	7	2 | 4.6 | 4.4
4	9.5213	22	9.5467	24	0.4533	9.9746	3	6	3 | 6.9 | 6.6
5	9.5235	21	9.5491	25	0.4509	9.9743	3	5	4 | 9.2 | 8.8
6	9.5256	22	9.5516	23	0.4484	9.9741	2	4	5 | 11.5 | 11.0
7	9.5278	21	9.5539	24	0.4461	9.9738	3	3	6 | 13.8 | 13.2
8	9.5299	21	9.5563	24	0.4437	9.9735	3	2	7 | 16.1 | 15.4
9	9.5320	21	9.5587	24	0.4413	9.9733	2	1	8 | 18.4 | 17.6
20.0	9.5341		9.5611		0.4389	9.9730	3	70.0	9 | 20.7 | 19.8
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade	

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.		
20.0	9.5341	20	9.5611	23	0.4389	9.9730	3	70.0			
1	9.5361	21	9.5634	24	0.4366	9.9727	3	9			
2	9.5382	20	9.5658	23	0.4342	9.9724	2	8		23	22
3	9.5402	21	9.5681	23	0.4319	9.9722	3	7	1	2.3	2.2
4	9.5423	20	9.5704	23	0.4296	9.9719	3	6	2	4.6	4.4
5	9.5443	20	9.5727	23	0.4273	9.9716	3	5	3	6.9	6.6
6	9.5463	21	9.5750	23	0.4250	9.9713	3	4	4	9.2	8.8
7	9.5484	20	9.5773	23	0.4227	9.9710	3	3	5	11.5	11.0
8	9.5504	19	9.5796	23	0.4204	9.9707	3	2	6	13.8	13.2
9	9.5523	20	9.5819	23	0.4181	9.9704	2	1	7	16.1	15.4
21.0	9.5543	20	9.5842	22	0.4158	9.9702	3	69.0	8	18.4	17.6
1	9.5563	20	9.5864	23	0.4136	9.9699	3	9	9	20.7	19.8
2	9.5583	19	9.5887	22	0.4113	9.9696	3	8			
3	9.5602	19	9.5909	23	0.4091	9.9693	3	7		21	20
4	9.5621	20	9.5932	22	0.4068	9.9690	3	6	1	2.1	2.0
5	9.5641	19	9.5954	22	0.4046	9.9687	3	5	2	4.2	4.0
6	9.5660	19	9.5976	22	0.4024	9.9684	3	4	3	6.3	6.0
7	9.5679	19	9.5998	22	0.4002	9.9681	3	3	4	8.4	8.0
8	9.5698	19	9.6020	22	0.3980	9.9678	3	2	5	10.5	10.0
9	9.5717	19	9.6042	22	0.3958	9.9675	3	1	6	12.6	12.0
22.0	9.5736	18	9.6064	22	0.3936	9.9672	3	68.0	7	14.7	14.0
1	9.5754	19	9.6086	22	0.3914	9.9669	3	9	8	16.8	16.0
2	9.5773	19	9.6108	21	0.3892	9.9666	4	8	9	18.9	18.0
3	9.5792	18	9.6129	22	0.3871	9.9662	3	7			
4	9.5810	18	9.6151	21	0.3849	9.9659	3	6		19	
5	9.5828	19	9.6172	22	0.3828	9.9656	3	5	1	1.9	
6	9.5847	18	9.6194	21	0.3806	9.9653	3	4	2	3.8	
7	9.5865	18	9.6215	21	0.3785	9.9650	3	3	3	5.7	
8	9.5883	18	9.6236	21	0.3764	9.9647	4	2	4	7.6	
9	9.5901	18	9.6257	22	0.3743	9.9643	3	1	5	9.5	
23.0	9.5919	18	9.6279	21	0.3721	9.9640	3	67.0	6	11.4	
1	9.5937	17	9.6300	21	0.3700	9.9637	3	9	7	13.3	
2	9.5954	18	9.6321	20	0.3679	9.9634	3	8	8	15.2	
3	9.5972	18	9.6341	21	0.3649	9.9631	4	7	9	17.1	
4	9.5990	17	9.6362	21	0.3638	9.9627	3	6			
5	9.6007	17	9.6383	21	0.3617	9.9624	3	5		18	17
6	9.6024	18	9.6404	20	0.3596	9.9621	4	4	1	1.8	1.7
7	9.6042	17	9.6424	21	0.3576	9.9617	3	3	2	3.6	3.4
8	9.6059	17	9.6445	20	0.3555	9.9614	3	2	3	5.4	5.1
9	9.6076	17	9.6465	21	0.3535	9.9611	4	1	4	7.2	6.8
24.0	9.6093	17	9.6486	20	0.3514	9.9607	3	66.0	5	9.0	8.5
1	9.6110	17	9.6506	21	0.3494	9.9604	3	9	6	10.8	10.2
2	9.6127	17	9.6527	20	0.3473	9.9601	4	8	7	12.6	11.9
3	9.6144	17	9.6547	20	0.3453	9.9597	3	7	8	14.4	13.6
4	9.6161	16	9.6567	20	0.3433	9.9594	4	6	9	16.2	15.3
5	9.6177	17	9.6587	20	0.3413	9.9590	3	5			
6	9.6194	16	9.6607	20	0.3393	9.9587	4	4		16	
7	9.6210	17	9.6627	20	0.3373	9.9583	3	3	1	1.6	
8	9.6227	16	9.6647	20	0.3353	9.9580	4	2	2	3.2	
9	9.6243	16	9.6667	20	0.3333	9.9576	3	1	3	4.8	
25.0	9.6259		9.6687		0.3313	9.9573		65.0	4	6.4	
									5	8.0	
									6	9.6	
									7	11.2	
									8	12.8	
									9	14.4	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade			

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.
25.0	9.6259	17	9.6687	19	0.3313	9.9573	4	65.0	
1	9.6276	16	9.6706	20	0.3294	9.9569	3	9	
2	9.6292	16	9.6726	20	0.3274	9.9566	4	8	
3	9.6308	16	9.6746	19	0.3254	9.9562	4	7	20 19
4	9.6324	16	9.6765	20	0.3235	9.9558	3	6	1 2.0 1.9 2 4.0 3.8
5	9.6340	16	9.6785	19	0.3215	9.9555	4	5	3 6.0 5.7 4 8.0 7.6
6	9.6356	15	9.6804	20	0.3196	9.9551	3	4	5 10.0 9.5 6 12.0 11.4
7	9 6371	16	9 6824	19	0.3176	9.9548	4	3	7 14.0 13.3
8	9.6387	16	9 6843	20	0.3157	9.9544	4	2	8 16.0 15.2
9	9.6403	15	9.6863	19	0.3137	9.9540	3	1	9 18.0 17.1
26.0	9.6418.	16	9.6882	19	0.3118	9.9537	4	64.0	
1	9.6434	15	9.6901	19	0.3099	9.9533	4	9	
2	9.6449	16	9.6920	19	0.3080	9 9529	4	8	
3	9.6465	15	9.6939	19	0.3061	9.9525	3	7	18 17
4	9.6480	15	9.6958	19	0.3042	9.9522	4	6	1 1.8 1.7 2 3.6 3.4
5	9.6495	15	9.6977	19	0.3023	9.9518	4	5	3 5.4 5.1 4 7.2 6.8
6	9.6510	16	9.6996	19	0.3004	9.9514	4	4	5 9.0 8.5 6 10.8 10.2
7	9.6526	15	9.7015	19	0.2985	9.9510	4	3	7 12.6 11.9
8	9.6541	15	9.7034	19	0.2966	9.9506	3	2	8 14.4 13.6 9 16.2 15.3
9	9.6556	14	9.7053	19	0.2947	9.9503	4	1	
27.0	9 6570	15	9.7072	18	0.2928	9.9499	4	63.0	
1	9.6585	15	9.7090	19	0.2910	9.9495	4	9	
2	9.6600	15	9.7109	19	0 2891	9.9491	4	8	
3	9.6615	14	9.7128	18	0.2872	9.9487	4	7	16 15
4	9.6629	15	9.7146	19	0.2854	9.9483	4	6	1 1.6 1.5 2 3.2 3.0
5	9.6644	15	9.7165	18	0.2835	9.9479	4	5	3 4.8 4.5 4 6.4 6.0
6	9.6659	14	9.7183	19	0.2817	9.9475	4	4	5 8.0 7.5 6 9.6 9.0
7	9.6673	14	9.7202	18	0.2798	9.9471	4	3	7 11.2 10.5
8	9.6687	15	9.7220	18	0.2780	9.9467	4	2	8 12.8 12.0 9 14.4 13.5
9	9.6702	14	9.7238	19	0.2762	9.9463	4	1	
28.0	9.6716	14	9.7257	18	0.2743	9.9459	4	62.0	
1	9.6730	14	9.7275	18	0.2725	9.9455	4	9	
2	9.6744	15	9.7293	18	0.2707	9.9451	4	8	14 13
3	9.6759	14	9.7311	19	0.2689	9.9447	4	7	1 1.4 1.3 2 2.8 2.6
4	9.6773	14	9.7330	18	0.2670	9.9443	4	6	3 4.2 3.9 4 5.6 5.2
5	9.6787	14	9.7348	18	0.2652	9.9439	4	5	5 7.0 6.5 6 8.4 7.8
6	9.6801	13	9.7366	18	0.2634	9.9435	4	4	7 9.8 9.1
7	9.6814	14	9.7384	18	0.2616	9.9431	4	3	8 11.2 10.4 9 12.6 11.7
8	9.6828	14	9.7402	18	0.2598	9.9427	5	2	
9	9.6842	14	9.7420	18	0.2580	9.9422	4	1	
29.0	9.6856	13	9.7438	17	0.2562	9.9418	4	61.0	
1	9.6869	14	9.7455	18	0.2545	9.9414	4	9	
2	9.6883	13	9.7473	18	0.2527	9.9410	4	8	3 4
3	9.6896	14	9.7491	18	0.2509	9.9406	5	7	1 0.3 0.4 2 0.6 0.8
4	9.6910	13	9.7509	17	0.2491	9.9401	4	6	3 0.9 1.2 4 1.2 1.6
5	9.6923	14	9.7526	18	0.2474	9.9497	4	5	5 1.5 2.0 6 1.8 2.4
6	9.6937	13	9.7544	18	0.2456	9.9393	5	4	7 2.1 2.8 8 2.4 3.2
7	9.6950	13	9.7562	17	0.2438	9.9388	4	3	9 2.7 3.6
8	9.6963	14	9.7579	18	0.2421	9.9384	4	2	
9	9.6977	13	9.7597	17	0.2403	9.9380	5	1	
30.0	9.6990		9.7614		0.2386	9.9375		60.0	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade	

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.
30.0	9.6990	13	9.7614	18	0.2386	9.9375	4	60.0	
1	9.7003	13	9.7632	17	0.2368	9.9371	4	9	
2	9.7016	13	9.7649	18	0.2351	9.9367	5	8	
3	9.7029	13	9.7667	17	0.2333	9.9362	4	7	
4	9.7042	13	9.7684	17	0.2316	9.9358	5	6	
5	9.7055	13	9.7701	18	0.2299	9.9353	4	5	
6	9.7068	12	9.7719	17	0.2281	9.9349	5	4	
7	9.7080	13	9.7736	17	0.2264	9.9344	4	3	
8	9.7093	13	9.7753	18	0.2247	9.9340	5	2	
9	9.7106	12	9.7771	17	0.2229	9.9335	4	1	
31.0	9.7118	13	9 7788	17	0.2212	9.9331	5	59.0	
1	9.7131	13	9.7805	17	0.2195	9.9326	4	9	
2	9.7144	12	9.7822	17	0.2178	9.9322	5	8	
3	9.7156	12	9.7839	17	0.2161	9.9317	5	7	
4	9.7168	13	9.7856	17	0.2144	9.9312	4	6	
5	9.7181	12	9.7873	17	0.2127	9.9308	5	5	
6	9.7193	12	9.7890	17	0.2110	9.9303	5	4	
7	9.7205	13	9.7907	17	0.2093	9.9298	4	3	
8	9.7218	12	9.7924	17	0.2076	9.9294	5	2	
9	9.7230	12	9.7941	17	0.2059	9.9289	5	1	
32.0	9.7242	12	9.7958	17	0.2042	9.9284	5	58.0	
1	9.7254	12	9.7975	17	0.2025	9.9279	5	9	
2	9.7266	12	9.7992	16	0.2008	9.9275	4	8	
3	9.7278	12	9.8008	17	0.1992	9.9270	5	7	
4	9.7290	12	9.8025	17	0.1975	9.9265	5	6	
5	9.7302	12	9.8042	17	0.1958	9.9260	5	5	
6	9.7314	12	9.8059	16	0.1941	9.9255	5	4	
7	9.7326	12	9.8075	17	0.1925	9.9251	4	3	
8	9 7338	11	9.8092	17	0.1908	9.9246	5	2	
9	9.7349	12	9.8109	16	0.1891	9.9241	5	1	
33.0	9.7361	12	9.8125	17	0.1875	9.9236	5	57.0	
1	9.7373	11	9.8142	16	0.1858	9.9231	5	9	
2	9.7384	12	9.8158	17	0.1842	9.9226	5	8	
3	9.7396	11	9.8175	16	0.1825	9.9221	5	7	
4	9.7407	12	9.8191	17	0.1809	9.9216	5	6	
5	9.7419	11	9.8208	16	0.1792	9.9211	5	5	
6	9.7430	12	9.8224	17	0.1776	9.9206	5	4	
7	9.7442	11	9.8241	16	0.1759	9.9201	5	3	
8	9.7453	11	9.8257	17	0.1743	9.9196	5	2	
9	9.7464	12	9.8274	16	0.1726	9.9191	5	1	
34.0	9.7476	11	9.8290	16	0.1710	9.9186	5	56.0	
1	9.7487	11	9.8306	17	0.1694	9.9181	6	9	
2	9.7498	11	9.8323	16	0.1677	9.9175	5	8	
3	9.7509	11	9.8339	16	0.1661	9.9170	5	7	
4	9.7520	11	9.8355	16	0.1645	9.9165	5	6	
5	9.7531	11	9.8371	16	0.1629	9.9160	5	5	
6	9.7542	11	9.8388	17	0.1612	9.9155	6	4	
7	9.7553	11	9.8404	16	0.1596	9.9149	5	3	
8	9.7564	11	9.8420	16	0.1580	9.9144	5	2	
9	9.7575	11	9.8436	16	0.1564	9.9139	5	1	
35.0	9.7586		9.8452		0.1548	9.9134	5	55.0	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade	

	18	17
1	1.8	1.7
2	3.6	3.4
3	5.4	5.1
4	7.2	6.8
5	9.0	8.5
6	10.8	10.2
7	12.6	11.9
8	14.4	13.6
9	16.2	15.3

	16
1	1.6
2	3.2
3	4.8
4	6.4
5	8.0
6	9.6
7	11.2
8	12.8
9	14.4

	13	12
1	1.3	1.2
2	2.6	2.4
3	3.9	3.6
4	5.2	4.8
5	6.5	6.0
6	7.8	7.2
7	9.1	8.4
8	10.4	9.6
9	11.7	10.8

	11
1	1.1
2	2.2
3	3.3
4	4.4
5	5.5
6	6.6
7	7.7
8	8.8
9	9.9

	5	6
1	0.5	0.6
2	1.0	1.2
3	1.5	1.8
4	2.0	2.4
5	2.5	3.0
6	3.0	3.6
7	3.5	4.2
8	4.0	4.8
9	4.5	5.4

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.
35.0	9.7586	11	9 8452	16	0.1548	9.9134	6	55.0	
1	9.7597	10	9.8468	16	0.1532	9.9128	6	9	
2	9.7607	11	9.8484	17	0.1516	9.9123	5	8	
3	9.7618	11	9.8501	16	0.1499	9.9118	5	7	17 | 16
4	9.7629	11	9.8517	16	0.1483	9.9112	6	6	1 | 1.7 | 1.6 2 | 3.4 | 3.2
5	9.7640	10	9.8533	16	0.1467	9.9107	5	5	3 | 5.1 | 4.8
6	9.7650	11	9.8549	16	0.1451	9.9101	6	4	4 | 6.8 | 6.4 5 | 8.5 | 8.0
7	9.7661	10	9.8565	16	0.1435	9.9096	5	3	6 | 10.2 | 9.6 7 | 11.9 | 11.2
8	9.7671	11	9.8581	16	0.1419	9.9091	5	2	8 | 13.6 | 12.8
9	9.7682	10	9.8597	16	0.1403	9.9085	6	1	9 | 15.3 | 14.4
36.0	9.7692	11	9.8613	16	0.1387	9.9080	5	54.0	
1	9.7703	10	9.8629	15	0.1371	9.9074	6	9	
2	9.7713	10	9.8644	16	0.1356	9.9069	5	8	
3	9.7723	11	9.8660	16	0.1340	9.9063	6	7	15
4	9.7734	10	9.8676	16	0.1324	9.9057	6	6	1 | 1.5 2 | 3.0
5	9.7744	10	9.8692	16	0.1308	9.9052	5	5	3 | 4.5 4 | 6.0
6	9.7754	10	9.8708	16	0.1292	9.9046	6	4	5 | 7.5 6 | 9.0
7	9.7764	10	9.8724	16	0.1276	9.9041	5	3	7 | 10.5 8 | 12.0
8	9.7774	11	9.8740	15	0.1260	9.9035	6	2	9 | 13.5
9	9.7785	10	9.8755	16	0.1245	9.9029	6	1	
37.0	9.7795	10	9.8771	16	0.1229	9.9023	6	53.0	
1	9.7805	10	9.8787	16	0.1213	9.9018	5	9	
2	9.7815	10	9.8803	15	0.1197	9.9012	6	8	11 | 10
3	9.7825	10	9.8818	16	0.1182	9.9006	6	7	1 | 1.1 | 1.0
4	9.7835	9	9.8834	16	0.1166	9.9000	6	6	2 | 2.2 | 2.0 3 | 3.3 | 3.0
5	9.7844	10	9.8850	15	0.1150	9.8995	5	5	4 | 4.4 | 4.0
6	9.7854	10	9.8865	16	0.1135	9.8989	6	4	5 | 5.5 | 5.0 6 | 6.6 | 6.0
7	9.7864	10	9.8881	16	0.1119	9.8983	6	3	7 | 7.7 | 7.0 8 | 8.8 | 8.0
8	9.7874	10	9.8897	15	0.1103	9.8977	6	2	9 | 9.9 | 9.0
9	9.7884	9	9.8912	16	0.1088	9.8971	6	1	
38.0	9.7893	10	9.8928	16	0.1072	9.8965	6	52.0	
1	9.7903	10	9.8944	15	0.1056	9.8959	6	9	
2	9.7913	9	9.8959	16	0.1041	9.8953	6	8	9
3	9.7922	10	9.8975	15	0.1025	9.8947	6	7	1 | 0.9 2 | 1.8
4	9.7932	9	9.8990	16	0.1010	9.8941	6	6	3 | 2.7 4 | 3.6
5	9.7941	10	9.9006	16	0.0994	9.8935	6	5	5 | 4.5 6 | 5.4
6	9.7951	9	9.9022	15	0.0978	9.8929	6	4	7 | 6.3 8 | 7.2
7	9.7960	10	9.9037	16	0.0963	9.8923	6	3	9 | 8.1
8	9.7970	9	9.9053	15	0.0947	9.8917	6	2	
9	9.7979	10	9.9068	16	0.0932	9.8911	6	1	
39.0	9.7989	9	9.9084	15	0.0916	9.8905	6	51.0	
1	9.7998	9	9.9099	16	0.0901	9.8899	6	9	
2	9.8007	10	9.9115	15	0.0885	9.8893	6	8	5 | 6
3	9.8017	9	9.9130	16	0.0870	9.8887	7	7	1 | 0.5 | 0.6 2 | 1.0 | 1.2
4	9.8026	9	9.9146	15	0.0854	9.8880	6	6	3 | 1.5 | 1.8 4 | 2.0 | 2.4
5	9.8035	9	9.9161	15	0.0839	9.8874	6	5	5 | 2.5 | 3.0
6	9.8044	9	9.9176	16	0.0824	9.8868	6	4	6 | 3.0 | 3.6 7 | 3.5 | 4.2
7	9.8053	10	9.9192	15	0.0808	9.8862	7	3	8 | 4.0 | 4.8 9 | 4.5 | 5.4
8	9.8063	9	9.9207	16	0.0793	9.8855	6	2	
9	9.8072	9	9.9223	15	0.0777	9.8849	6	1	
40.0	9.8081		9.9238		0.0762	9.8843		50.0	
	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade	

Grade	Lg. Sin.	d.	Lg. Tg.	d. c.	Lg. Cot.	Lg. Cos.	d.		P. P.
40.0	9.8081		9.9238		0.0762	9.8843		50.0	
		9		16			7		
1	9.8090		9.9254		0.0746	9.8836		9	
		9		15			6		
2	9.8099		9.9269		0.0731	9.8830		8	
		9		15			7		16
3	9.8108		9.9284		0.0716	9.8823		7	
		9		16			6		1 1.6
4	9.8117		9.9300		0.0700	9.8817		6	2 3.2
		8		15			7		3 4.8
5	9.8125		9.9315		0.0685	9.8810		5	4 6.4
		9		15			6		5 8.0
6	9.8134		9.9330		0.0670	9.8804		4	6 9.6
		9		16			7		7 11.2
7	9.8143		9.9346		0.0654	9.8797		3	8 12.8
		9		15			6		9 14.4
8	9.8152		9.9361		0.0639	9.8791		2	
		9		15			7		
9	9.8161		9.9376		0.0624	9.8784		1	
		8		16			6		
41.0	9.8169		9.9392		0.0608	9.8778		49.0	
		9		15			7		
1	9.8178		9.9407		0.0593	9.8771		9	
		9		15			6		
2	9.8187		9.9422		0.0578	9.8765		8	
		8		16			7		15
3	9.8195		9.9438		0.0562	9.8758		7	
		9		15			7		1 1.5
4	9.8204		9.9453		0.0547	9.8751		6	2 3.0
		9		15			6		3 4.5
5	9.8213		9.9468		0.0532	9.8745		5	4 6.0
		8		15			7		5 7.5
6	9.8221		9.9483		0.0517	9.8738		4	6 9.0
		9		16			7		7 10.5
7	9.8230		9.9499		0.0501	9.8731		3	8 12.0
		8		15			7		9 13.5
8	9.8238		9.9514		0.0486	9.8724		2	
		9		15			6		
9	9.8247		9.9529		0.0471	9.8718		1	
		8		15			7		
42.0	9.8255		9.9544		0.0456	9.8711		48.0	
		9		16			7		
1	9.8264		9.9560		0.0440	9.8704		9	
		8		15			7		
2	9.8272		9.9575		0.0425	9.8697		8	
		8		15			7		9
3	9.8280		9.9590		0.0410	9.8690		7	
		9		15			7		1 0.9
4	9.8289		9.9605		0.0395	9.8683		6	2 1.8
		8		16			7		3 2.7
5	9.8297		9.9621		0.0379	9.8676		5	4 3.6
		8		15			7		5 4.5
6	9.8305		9.9636		0.0364	9.8669		4	6 5.4
		8		15			7		7 6.3
7	9.8313		9.9651		0.0349	9.8662		3	8 7.2
		9		15			7		9 8.1
8	9.8322		9.9666		0.0334	9.8655		2	
		8		15			7		
9	9.8330		9.9681		0.0319	9.8648		1	
		8		16			7		
43.0	9.8338		9.9697		0.0303	9.8641		47.0	
		8		15			7		
1	9.8346		9.9712		0.0288	9.8634		9	
		8		15			7		
2	9.8354		9.9727		0.0273	9.8627		8	
		8		15			7		8
3	9.8362		9.9742		0.0258	9.8620		7	
		8		15			7		1 0.8
4	9.8370		9.9757		0.0243	9.8613		6	2 1.6
		8		15			7		3 2.4
5	9.8378		9.9772		0.0228	9.8606		5	4 3.2
		8		16			8		5 4.0
6	9.8386		9.9788		0.0212	9.8598		4	6 4.8
		8		15			7		7 5.6
7	9.8394		9.9803		0.0197	9.8591		3	8 6.4
		8		15			7		9 7.2
8	9.8402		9.9818		0.0182	9.8584		2	
		8		15			7		
9	9.8410		9.9833		0.0167	9.8577		1	
		8		15			8		
44.0	9.8418		9.9848		0.0152	9.8569		46.0	
		8		16			7		
1	9.8426		9.9864		0.0136	9.8562		9	
		7		15			7		
2	9.8433		9.9879		0.0121	9.8555		8	
		8		15			8		6 7
3	9.8441		9.9894		0.0106	9.8547		7	1 0.6 0.7
		8		15			7		2 1.2 1.4
4	9.8449		9.9909		0.0091	9.8540		6	3 1.8 2.1
		8		15			8		4 2.4 2.8
5	9.8457		9.9924		0.0076	9.8532		5	5 3.0 3.5
		7		15			7		6 3.6 4.2
6	9.8464		9.9939		0.0061	9.8525		4	7 4.2 4.9
		8		16			8		8 4.8 5.6
7	9.8472		9.9955		0.0045	9.8517		3	9 5.4 6.3
		8		15			7		
8	9.8480		9.9970		0.0030	9.8510		2	
		7		15			8		
9	9.8487		9.9985		0.0015	9.8502		1	
		8		15			7		
45.0	9.8495		10.0000		0.0000	9.8495		45.0	

	Lg. Cos.	d.	Lg. Cot.	d. c.	Lg. Tg.	Lg. Sin.	d.	Grade	P. P.

Taf. IV. Grade, Stunden, Minuten und Secunden in Decimaltheilen des Tages.

Grade.	Stunden u. Minuten.	Decimalth. des Tages.	Grade.	Stunden u. Minuten.	Decimalth. des Tages.	Grade.	Stunden u. Minuten.	Decimalth. des Tages.	Grade.	Stunden u. Minuten.	Decimalth. des Tages.
o	h. m.		o	h. m.		o	h. m.		o	h. m.	
0	0 0	0.0000	50	3 20	0.1389	100	6 40	0.2778	150	10 0	0.4167
1	0 4	0.0028	51	3 24	0.1417	101	6 44	0.2806	151	10 4	0.4194
2	0 8	0.0056	52	3 28	0.1444	102	6 48	0.2833	152	10 8	0.4222
3	0 12	0.0083	53	3 32	0.1472	103	6 52	0.2861	153	10 12	0.4250
4	0 16	0.0111	54	3 36	0.1500	104	6 56	0.2889	154	10 16	0.4278
5	0 20	0.0139	55	3 40	0.1528	105	7 0	0.2917	155	10 20	0.4306
6	0 24	0.0167	56	3 44	0.1556	106	7 4	0.2944	156	10 24	0.4333
7	0 28	0.0194	57	3 48	0.1583	107	7 8	0.2972	157	10 28	0.4361
8	0 32	0.0222	58	3 52	0.1611	108	7 12	0.3000	158	10 32	0.4389
9	0 36	0.0250	59	3 56	0.1639	109	7 16	0.3028	159	10 36	0.4417
10	0 40	0.0278	60	4 0	0.1667	110	7 20	0.3056	160	10 40	0.4444
11	0 44	0.0306	61	4 4	0.1694	111	7 24	0.3083	161	10 44	0.4472
12	0 48	0.0333	62	4 8	0.1722	112	7 28	0.3111	162	10 48	0.4500
13	0 52	0.0361	63	4 12	0.1750	113	7 32	0.3139	163	10 52	0.4528
14	0 56	0.0389	64	4 16	0.1778	114	7 36	0.3167	164	10 56	0.4556
15	1 0	0.0417	65	4 20	0.1806	115	7 40	0.3194	165	11 0	0.4583
16	1 4	0.0444	66	4 24	0.1833	116	7 44	0.3222	166	11 4	0.4611
17	1 8	0.0472	67	4 28	0.1861	117	7 48	0.3250	167	11 8	0.4639
18	1 12	0.0500	68	4 32	0.1889	118	7 52	0.3278	168	11 12	0.4667
19	1 16	0.0528	69	4 36	0.1917	119	7 56	0.3306	169	11 16	0.4694
20	1 20	0.0556	70	4 40	0.1944	120	8 0	0.3333	170	11 20	0.4722
21	1 24	0.0583	71	4 44	0.1972	121	8 4	0.3361	171	11 24	0.4750
22	1 28	0.0611	72	4 48	0.2000	122	8 8	0.3389	172	11 28	0.4778
23	1 32	0.0639	73	4 52	0.2028	123	8 12	0.3417	173	11 32	0.4806
24	1 36	0.0667	74	4 56	0.2056	124	8 16	0.3444	174	11 36	0.4833
25	1 40	0.0694	75	5 0	0.2083	125	8 20	0.3472	175	11 40	0.4861
26	1 44	0.0722	76	5 4	0.2111	126	8 24	0.3500	176	11 44	0.4889
27	1 48	0.0750	77	5 8	0.2139	127	8 28	0.3528	177	11 48	0.4917
28	1 52	0.0778	78	5 12	0.2167	128	8 32	0.3556	178	11 52	0.4944
29	1 56	0.0806	79	5 16	0.2194	129	8 36	0.3583	179	11 56	0.4972
30	2 0	0.0833	80	5 20	0.2222	130	8 40	0.3611	180	12 0	0.5000
31	2 4	0.0861	81	5 24	0.2250	131	8 44	0.3639			
32	2 8	0.0889	82	5 28	0.2278	132	8 48	0.3667			
33	2 12	0.0917	83	5 32	0.2306	133	8 52	0.3694			
34	2 16	0.0944	84	5 36	0.2333	134	8 56	0.3722			
35	2 20	0.0972	85	5 40	0.2361	135	9 0	0.3750	o	m. s.	
36	2 24	0.1000	86	5 44	0.2389	136	9 4	0.3778	0.1	0 24	0.0003
37	2 28	0.1028	87	5 48	0.2417	137	9 8	0.3806	0.2	0 48	0.0006
38	2 32	0.1056	88	5 52	0.2444	138	9 12	0.3833	0.3	1 12	0.0008
39	2 36	0.1083	89	5 56	0.2472	139	9 16	0.3861	0.4	1 36	0.0011
40	2 40	0.1111	90	6 0	0.2500	140	9 20	0.3889	0.5	2 0	0.0014
41	2 44	0.1139	91	6 4	0.2528	141	9 24	0.3917	0.6	2 24	0.0017
42	2 48	0.1167	92	6 8	0.2556	142	9 28	0.3944	0.7	2 48	0.0019
43	2 52	0.1194	93	6 12	0.2583	143	9 32	0.3972	0.8	3 12	0.0022
44	2 56	0.1222	94	6 16	0.2611	144	9 36	0.4000	0.9	3 36	0.0025
45	3 0	0.1250	95	6 20	0.2639	145	9 40	0.4028	1.0	4 0	0.0028
46	3 4	0.1278	96	6 24	0.2667	146	9 44	0.4056			
47	3 8	0.1306	97	6 28	0.2694	147	9 48	0.4083			
48	3 12	0.1333	98	6 32	0.2722	148	9 52	0.4111			
49	3 16	0.1361	99	6 36	0.2750	149	9 56	0.4139			
50	3 20	0.1389	100	6 40	0.2778	150	10 0	0.4167			

TAFEL V.

LOGARITHMEN

DER

SUMMEN UND DIFFERENZEN.

Gegeben log. a und log. b, wo a > b, so ist bis A = 10.

für Summen	für Differenzen
wenn 10 + log. b − log. a = A	wenn log. a − log. b = B
log. (a + b) = log a + B.	log. (a − b) = log. b + A − 10.

Additions- und Subtractions-Logarithmen.

A	B 0	1	2	3	4	5	6	7	8	9
6.	0.0000	0001	0001	0001	0001	0001	0002	0002	0003	0003
7.0	0.0004	0004	0005	0005	0005	0005	0005	0005	0005	0005
1	0.0005	0006	0006	0006	0006	0006	0006	0006	0007	0007
2	0.0007	0007	0007	0007	0008	0008	0008	0008	0008	0008
3	0.0009	0009	0009	0009	0009	0010	0010	0010	0010	0011
4	0.0011	0011	0011	0012	0012	0012	0013	0013	0013	0013
5	0.0014	0014	0014	0015	0015	0015	0016	0016	0016	0017
6	0.0017	0018	0018	0018	0019	0019	0020	0020	0021	0021
7	0.0022	0022	0023	0023	0024	0024	0025	0025	0026	0027
8	0.0027	0028	0029	0029	0030	0031	0031	0032	0033	0034
9	0.0034	0035	0036	0037	0038	0039	0039	0040	0041	0042
8.0	0.0043	0044	0045	0046	0047	0048	0050	0051	0052	0053
1	0.0054	0056	0057	0058	0060	0061	0062	0064	0065	0067
2	0.0068	0070	0071	0073	0075	0077	0078	0080	0082	0084
3	0.0086	0088	0090	0092	0094	0096	0098	0101	0103	0105
4	0.0108	0110	0113	0115	0118	0121	0123	0126	0129	0132
5	0.0135	0138	0141	0145	0148	0151	0155	0158	0162	0166
6	0.0170	0173	0177	0181	0186	0190	0194	0199	0203	0208
7	0.0212	0217	0222	0227	0232	0238	0243	0248	0254	0260
8	0.0266	0272	0278	0284	0291	0297	0304	0311	0318	0325
9	0.0332	0339	0347	0355	0363	0371	0379	0387	0396	0405
9.0	0.0414									
A	B 0	1	2	3	4	5	6	7	8	9

P. P.		
	4	5
1	0.4	0.5
2	0.8	1.0
3	1.2	1.5
4	1.6	2.0
5	2.0	2.5
6	2.4	3.0
7	2.8	3.5
8	3.2	4.0
9	3.6	4.5
	6	7
1	0.6	0.7
2	1.2	1.4
3	1.8	2.1
4	2.4	2.8
5	3.0	3.5
6	3.6	4.2
7	4.2	4.9
8	4.8	5.6
9	5.4	6.3
	8	9
1	0.8	0.9
2	1.6	1.8
3	2.4	2.7
4	3.2	3.6
5	4.0	4.5
6	4.8	5.4
7	5.6	6.3
8	6.4	7.2
9	7.2	8.1

A	B 0	1	2	3	4	5	6	7	8	9	P. P.
9.00	0.0414	0415	0416	0417	0418	0418	0419	0420	0421	0422	
01	0.0423	0424	0425	0426	0427	0428	0429	0430	0431	0432	
02	0.0432	0433	0434	0435	0436	0437	0438	0439	0440	0441	
03	0.0442	0443	0444	0445	0446	0447	0448	0449	0450	0451	
04	0.0452	0453	0454	0455	0456	0457	0458	0459	0460	0461	
05	0.0462	0463	0464	0465	0466	0467	0468	0469	0470	0471	
06	0.0472	0473	0474	0475	0476	0477	0478	0479	0480	0481	
07	0.0482	0483	0485	0486	0487	0488	0489	0490	0491	0492	
08	0.0493	0494	0495	0496	0497	0498	0500	0501	0502	0503	
09	0.0504	0505	0506	0507	0508	0509	0511	0512	0513	0514	
9.10	0.0515	0516	0517	0518	0519	0521	0522	0523	0524	0525	
11	0.0526	0527	0529	0530	0531	0532	0533	0534	0535	0537	
12	0.0538	0539	0540	0541	0542	0544	0545	0546	0547	0548	
13	0.0550	0551	0552	0553	0554	0556	0557	0558	0559	0560	
14	0.0562	0563	0564	0565	0566	0568	0569	0570	0571	0573	
15	0.0574	0575	0576	0578	0579	0580	0581	0583	0584	0585	
16	0.0586	0588	0589	0590	0591	0593	0594	0595	0597	0598	
17	0.0599	0600	0602	0603	0604	0606	0607	0608	0609	0611	
18	0.0612	0613	0615	0616	0617	0619	0620	0621	0623	0624	
19	0.0625	0627	0628	0629	0631	0632	0633	0635	0636	0638	
9.20	0.0639	0640	0642	0643	0644	0646	0647	0649	0650	0651	
21	0.0653	0654	0656	0657	0658	0660	0661	0663	0664	0665	
22	0.0667	0668	0670	0671	0673	0674	0675	0677	0678	0680	
23	0.0681	0683	0684	0686	0687	0689	0690	0691	0693	0694	
24	0.0696	0697	0699	0700	0702	0703	0705	0706	0708	0709	
25	0.0711	0712	0714	0715	0717	0718	0720	0721	0723	0725	
26	0.0726	0728	0729	0731	0732	0734	0735	0737	0738	0740	
27	0.0742	0743	0745	0746	0748	0749	0751	0753	0754	0756	
28	0.0757	0759	0761	0762	0764	0766	0767	0769	0770	0772	
29	0.0774	0775	0777	0779	0780	0782	0783	0785	0787	0788	
9.30	0.0790	0792	0793	0795	0797	0798	0800	0802	0804	0805	
31	0.0807	0809	0810	0812	0814	0815	0817	0819	0821	0822	
32	0.0824	0826	0827	0829	0831	0833	0834	0836	0838	0840	
33	0.0841	0843	0845	0847	0849	0850	0852	0854	0856	0857	
34	0.0859	0861	0863	0865	0866	0868	0870	0872	0874	0876	
35	0.0877	0879	0881	0883	0885	0887	0888	0890	0892	0894	
36	0.0896	0898	0900	0901	0903	0905	0907	0909	0911	0913	
37	0.0915	0917	0918	0920	0922	0924	0926	0928	0930	0932	
38	0.0934	0936	0938	0940	0942	0944	0945	0947	0949	0951	
39	0.0953	0955	0957	0959	0961	0963	0965	0967	0969	0971	
9.40	0.0973	0975	0977	0979	0981	0983	0985	0987	0989	0991	
41	0.0993	0996	0998	1000	1002	1004	1006	1008	1010	1012	
42	0.1014	1016	1018	1020	1022	1025	1027	1029	1031	1033	
43	0.1035	1037	1039	1042	1044	1046	1048	1050	1052	1054	
44	0.1057	1059	1061	1063	1065	1067	1070	1072	1074	1076	
45	0.1078	1081	1083	1085	1087	1089	1092	1094	1096	1098	
46	0.1101	1103	1105	1107	1110	1112	1114	1116	1119	1121	
47	0.1123	1125	1128	1130	1132	1135	1137	1139	1141	1144	
48	0.1146	1148	1151	1153	1155	1158	1160	1162	1165	1167	
49	0.1169	1172	1174	1177	1179	1181	1184	1186	1189	1191	
9.50	0.1193	1196	1198	1201	1203	1205	1208	1210	1213	1215	
A	B 0	1	2	3	4	5	6	7	8	9	A

	2
1	0.2
2	0.4
3	0.6
4	0.8
5	1.0
6	1.2
7	1.4
8	1.6
9	1.8

	3
1	0.3
2	0.6
3	0.9
4	1.2
5	1.5
6	1.8
7	2.1
8	2.4
9	2.7

A	B 0	1	2	3	4	5	6	7	8	9	P. P.
9.50	0.1193	1196	1198	1201	1203	1205	1208	1210	1213	1215	
51	0.1218	1220	1222	1225	1227	1230	1232	1235	1237	1240	
52	0.1242	1245	1247	1250	1252	1255	1257	1260	1262	1265	
53	0.1267	1270	1272	1275	1277	1280	1283	1285	1288	1290	
54	0.1293	1295	1298	1301	1303	1306	1308	1311	1314	1316	
55	0.1319	1321	1324	1327	1329	1332	1335	1337	1340	1343	
56	0.1345	1348	1351	1353	1356	1359	1361	1364	1367	1369	
57	0.1372	1375	1377	1380	1383	1386	1388	1391	1394	1397	
58	0.1399	1402	1405	1408	1410	1413	1416	1419	1422	1424	
59	0.1427	1430	1433	1436	1438	1441	1444	1447	1450	1453	
9.60	0.1455	1458	1461	1464	1467	1470	1473	1475	1478	1481	
61	0.1484	1487	1490	1493	1496	1499	1502	1504	1507	1510	
62	0.1513	1516	1519	1522	1525	1528	1531	1534	1537	1540	
63	0.1543	1546	1549	1552	1555	1558	1561	1564	1567	1570	
64	0.1573	1576	1579	1582	1585	1588	1591	1594	1598	1601	
65	0.1604	1607	1610	1613	1616	1619	1622	1625	1629	1632	
66	0.1635	1638	1641	1644	1647	1651	1654	1657	1660	1663	
67	0.1666	1670	1673	1676	1679	1682	1686	1689	1692	1695	
68	0.1699	1702	1705	1708	1712	1715	1718	1721	1725	1728	
69	0.1731	1735	1738	1741	1744	1748	1751	1754	1758	1761	
9.70	0.1764	1768	1771	1774	1778	1781	1784	1788	1791	1795	
71	0.1798	1801	1805	1808	1812	1815	1818	1822	1825	1829	
72	0.1832	1836	1839	1842	1846	1849	1853	1856	1860	1863	
73	0.1867	1870	1874	1877	1881	1884	1888	1891	1895	1898	
74	0.1902	1906	1909	1913	1916	1920	1923	1927	1931	1934	
75	0.1938	1941	1945	1949	1952	1956	1959	1963	1967	1970	
76	0.1974	1978	1981	1985	1989	1992	1996	2000	2003	2007	
77	0.2011	2015	2018	2022	2026	2029	2033	2037	2041	2044	
78	0.2048	2052	2056	2059	2063	2067	2071	2075	2078	2082	
79	0.2086	2090	2094	2097	2101	2105	2109	2113	2117	2121	
9.80	0.2124	2128	2132	2136	2140	2144	2148	2152	2156	2159	
81	0.2163	2167	2171	2175	2179	2183	2187	2191	2195	2199	
82	0.2203	2207	2211	2215	2219	2223	2227	2231	2235	2239	
83	0.2243	2247	2251	2255	2259	2263	2267	2271	2275	2279	
84	0.2284	2288	2292	2296	2300	2304	2308	2312	2316	2321	
85	0.2325	2329	2333	2337	2341	2346	2350	2354	2358	2362	
86	0.2366	2371	2375	2379	2383	2388	2392	2396	2400	2405	
87	0.2409	2413	2417	2422	2426	2430	2434	2439	2443	2447	
88	0.2452	2456	2460	2465	2469	2473	2478	2482	2486	2491	
89	0.2495	2499	2504	2508	2513	2517	2521	2526	2530	2535	
9.90	0.2539	2543	2548	2552	2557	2561	2566	2570	2575	2579	
91	0.2584	2588	2593	2597	2602	2606	2611	2615	2620	2624	
92	0.2629	2633	2638	2642	2647	2651	2656	2661	2665	2670	
93	0.2674	2679	2684	2688	2693	2697	2702	2707	2711	2716	
94	0.2721	2725	2730	2735	2739	2744	2749	2753	2758	2763	
95	0.2767	2772	2777	2782	2786	2791	2796	2801	2806	2810	
96	0.2815	2820	2824	2829	2834	2839	2844	2848	2853	2858	
97	0.2863	2868	2873	2877	2882	2887	2892	2897	2902	2907	
98	0.2911	2916	2921	2926	2931	2936	2941	2946	2951	2956	
99	0.2961	2966	2970	2975	2980	2985	2990	2995	3000	3005	
10.00	0.3010	3015	3020	3025	3030	3035	3040	3045	3050	3056	

	4
1	0.4
2	0.8
3	1.2
4	1.6
5	2.0
6	2.4
7	2.8
8	3.2
9	3.6

	5
1	0.5
2	1.0
3	1.5
4	2.0
5	2.5
6	3.0
7	3.5
8	4.0
9	4.5

	6
1	0.6
2	1.2
3	1.8
4	2.4
5	3.0
6	3.6
7	4.2
8	4.8
9	5.4

A	B 0	1	2	3	4	5	6	7	8	9	P. P.
0.00	0.3010	3015	3020	3025	3030	3035	3040	3045	3050	3056	
01	0.3061	3066	3071	3076	3081	3086	3091	3096	3101	3106	
02	0.3111	3117	3122	3127	3132	3137	3142	3147	3153	3158	
03	0.3163	3168	3173	3178	3184	3189	3194	3199	3204	3210	
04	0.3215	3220	3225	3231	3236	3241	3246	3252	3257	3262	
05	0.3267	3273	3278	3283	3289	3294	3299	3305	3310	3315	
06	0.3321	3326	3331	3337	3342	3347	3353	3358	3364	3369	
07	0.3374	3380	3385	3391	3396	3401	3407	3412	3418	3423	
08	0.3429	3434	3440	3445	3451	3456	3462	3467	3473	3478	
09	0.3484	3489	3495	3500	3506	3511	3517	3522	3528	3533	
0.10	0.3539	3545	3551	3556	3561	3567	3573	3578	3584	3589	
11	0.3595	3601	3606	3612	3618	3623	3629	3635	3640	3646	
12	0.3652	3657	3663	3669	3674	3680	3686	3692	3697	3703	
13	0.3709	3715	3720	3726	3732	3738	3743	3749	3755	3761	
14	0.3766	3772	3778	3784	3790	3796	3801	3807	3813	3819	
15	0.3825	3831	3836	3842	3848	3854	3860	3866	3872	3878	
16	0.3884	3889	3895	3901	3907	3913	3919	3925	3931	3937	
17	0.3943	3949	3955	3961	3967	3973	3979	3985	3991	3997	
18	0.4003	4009	4015	4021	4027	4033	4039	4045	4051	4057	
19	0.4063	4069	4076	4082	4088	4094	4100	4106	4112	4118	
0.20	0.4124	4131	4137	4143	4149	4155	4161	4167	4174	4180	
21	0.4186	4192	4198	4205	4211	4217	4223	4229	4236	4242	

5	
1	0.5
2	1.0
3	1.5
4	2.0
5	2.5
6	3.0
7	3.5
8	4.0
9	4.5

Hier ist, wenn a > b, abweichend von dem Vorigen

für Summen	für Differenzen
wenn log a — log. b = A	wenn log. a — log. b = B
log. (a + b) = log. b + B	log. (a — b) = log. b + A.

6	
1	0.6
2	1.2
3	1.8
4	2.4
5	3.0
6	3.6
7	4.2
8	4.8
9	5.4

TAFEL VI.

Subtractions-Logarithmen,

wenn die Differenz der gegebenen Logarithmen grösser als 0,4200 ist.

Formel. Gegeben: log. a und log. b, wo log. a > log. b, so ist, wenn log. a — log. b. = B gesetzt wird, log. (a — b) = log. a + C — 10.

B	C 0	1	2	3	4	5	6	7	8	9	A
0.40	9.7795	7802	7808	7815	7821	7828	7834	7841	7847	7854	
41	9.7860	7866	7873	7879	7885	7892	7898	7904	7910	7916	
42	9.7923	7929	7935	7941	7947	7953	7959	7965	7971	7977	
43	9.7983	7989	7995	8000	8006	8012	8018	8024	8029	8035	
44	9 8041	8047	8052	8058	8064	8069	8075	8080	8086	8091	
45	9.8097	8102	8108	8113	8119	8124	8129	8135	8140	8146	
46	9.8151	8156	8161	8167	8172	8177	8182	8188	8193	8198	
47	9.8203	8208	8213	8218	8223	8228	8233	8238	8243	8248	
48	9 8253	8258	8263	8268	8273	8278	8283	8288	8292	8297	
49	9.8302	8307	8312	8316	8321	8326	8330	8335	8340	8344	
0.50	9 8349	8354	8358	8363	8367	8372	8377	8381	8386	8390	
B	C 0	1	2	3	4	5	6	7	8	9	A

7	
1	0.7
2	1.4
3	2.1
4	2.8
5	3.5
6	4.2
7	4.9
8	5.6
9	6.3

B	C 0	1	2	3	4	5	6	7	8	9
0.50	9.8349	8354	8358	8363	8367	8372	8377	8381	8386	8390
51	9.8395	8399	8404	8408	8412	8417	8421	8426	8430	8434
52	9.8439	8443	8447	8451	8456	8460	8464	8469	8473	8477
53	9.8481	8485	8489	8494	8498	8502	8506	8510	8514	8518
54	9.8522	8526	8530	8534	8538	8542	8546	8550	8554	8558
55	9.8562	8566	8570	8574	8578	8582	8586	8589	8593	8597
56	9.8601	8605	8608	8612	8616	8620	8623	8627	8631	8635
57	9.8638	8642	8646	8649	8653	8657	8660	8664	8667	8671
58	9.8675	8678	8682	8685	8689	8692	8696	8699	8703	8706
59	9.8710	8713	8717	8720	8723	8727	8730	8734	8737	8740
0.60	9.8744	8747	8750	8754	8757	8760	8764	8767	8770	8774
61	9.8777	8780	8783	8786	8790	8793	8796	8799	8802	8806
62	9.8809	8812	8815	8818	8821	8824	8828	8831	8834	8837
63	9.8840	8843	8846	8849	8852	8855	8858	8861	8864	8867
64	9.8870	8873	8876	8879	8882	8885	8888	8891	8894	8896
65	9.8899	8902	8905	8908	8911	8914	8916	8919	8922	8925
66	9.8928	8931	8933	8936	8939	8942	8944	8947	8950	8953
67	9.8955	8958	8961	8963	8966	8969	8972	8974	8977	8980
68	9.8982	8985	8987	8990	8993	8995	8998	9000	9003	9006
69	9.9008	9011	9013	9016	9018	9021	9023	9026	9028	9031
0.70	9.9033	9036	9038	9041	9043	9046	9048	9051	9053	9056
71	9.9058	9060	9063	9065	9068	9070	9072	9075	9077	9080
72	9.9082	9084	9087	9089	9091	9094	9096	9098	9101	9103
73	9.9105	9107	9110	9112	9114	9116	9119	9121	9123	9125
74	9.9128	9130	9132	9134	9137	9139	9141	9143	9145	9147
75	9.9150	9152	9154	9156	9158	9160	9162	9165	9167	9169
76	9.9171	9173	9175	9177	9179	9181	9183	9186	9188	9190
77	9.9192	9194	9196	9198	9200	9202	9204	9206	9208	9210
78	9.9212	9214	9216	9218	9220	9222	9224	9226	9228	9230
79	9.9232	9233	9235	9237	9239	9241	9243	9245	9247	9249
0.80	9.9251	9252	9254	9256	9258	9260	9262	9264	9265	9267
81	9.9269	9271	9273	9275	9276	9278	9280	9282	9284	9285
82	9.9287	9289	9291	9293	9294	9296	9298	9300	9301	9303
83	9.9305	9307	9308	9310	9312	9313	9315	9317	9319	9320
84	9.9322	9324	9325	9327	9329	9330	9332	9334	9335	9337
85	9.9339	9340	9342	9344	9345	9347	9348	9350	9352	9353
86	9.9355	9356	9358	9360	9361	9363	9364	9366	9368	9369
87	9.9371	9372	9374	9375	9377	9378	9380	9381	9383	9385
88	9.9386	9388	9389	9391	9392	9394	9395	9397	9398	9400
89	9.9401	9403	9404	9405	9407	9408	9410	9411	9413	9414
0.90	9.9416	9417	9419	9420	9421	9423	9424	9426	9427	9428
91	9.9430	9431	9433	9434	9435	9437	9438	9440	9441	9442
92	9.9444	9445	9446	9448	9449	9450	9452	9453	9455	9456
93	9.9457	9459	9460	9461	9462	9464	9465	9466	9468	9469
94	9.9470	9472	9473	9474	9476	9477	9478	9479	9481	9482
95	9.9483	9484	9486	9487	9488	9489	9491	9492	9493	9494
96	9.9496	9497	9498	9499	9501	9502	9503	9504	9505	9507
97	9.9508	9509	9510	9511	9513	9514	9515	9516	9517	9518
98	9.9520	9521	9522	9523	9524	9525	9527	9528	9529	9530
99	9.9531	9532	9533	9535	9536	9537	9538	9539	9540	9541
1.00	9.9542	9544	9545	9546	9547	9548	9549	9550	9551	9552
B	C 0	1	2	3	4	5	6	7	8	9

P. P.

	5	4	3
1	0.5	0.4	0.3
2	1.0	0.8	0.6
3	1.5	1.2	0.9
4	2.0	1.6	1.2
5	2.5	2.0	1.5
6	3.0	2.4	1.8
7	3.5	2.8	2.1
8	4.0	3.2	2.4
9	4.5	3.6	2.7

B	C 0	1	2	3	4	5	6	7	8	9	P. P.
1.00	9.9542	9544	9545	9546	9547	9548	9549	9550	9551	9552	
01	9.9553	9554	9556	9557	9558	9559	9560	9561	9562	9563	
02	9.9564	9565	9566	9567	9568	9569	9570	9571	9572	9573	
03	9.9575	9576	9577	9578	9579	9580	9581	9582	9583	9584	
04	9.9585	9586	9587	9588	9589	9590	9591	9592	9593	9594	
05	9.9595	9596	9597	9598	9598	9599	9600	9601	9602	9603	
06	9.9604	9605	9606	9607	9608	9609	9610	9611	9612	9613	
07	9.9614	9615	9616	9616	9617	9618	9619	9620	9621	9622	
08	9.9623	9624	9625	9626	9626	9627	9628	9629	9630	9631	
09	9.9632	9633	9634	9634	9635	9636	9637	9638	9639	9640	
1.10	9.9641	9641	9642	9643	9644	9645	9646	9647	9647	9648	
11	9 9649	9650	9651	9652	9652	9653	9654	9655	9656	9657	
12	9.9657	9658	9659	9660	9661	9661	9662	9663	9664	9665	
13	9.9665	9666	9667	9668	9669	9669	9670	9671	9672	9673	
14	9.9673	9674	9675	9676	9677	9677	9678	9679	9680	9680	
15	9.9681	9682	9683	9683	9684	9685	9686	9686	9687	9688	
16	9.9689	9689	9690	9691	9692	9692	9693	9694	9695	9695	
17	9.9696	9697	9697	9698	9699	9700	9700	9701	9702	9702	
18	9.9703	9704	9705	9705	9706	9707	9707	9708	9709	9709	
19	9.9710	9711	9712	9712	9713	9714	9714	9715	9716	9716	
1.20	9.9717	9718	9718	9719	9720	9720	9721	9722	9722	9723	
1.2	9.9717	9724	9730	9736	9743	9749	9755	9760	9766	9771	
3	9.9777	9782	9787	9792	9797	9802	9806	9811	9815	9819	
4	9.9824	9828	9832	9836	9839	9843	9847	9850	9854	9857	
5	9.9860	9864	9867	9870	9873	9876	9879	9882	9884	9887	
6	9.9890	9892	9895	9897	9899	9902	9904	9906	9908	9910	
7	9.9912	9914	9916	9918	9920	9922	9924	9926	9927	9929	
8	9.9931	9932	9934	9935	9937	9938	9940	9941	9942	9944	
9	9 9945	9946	9947	9949	9950	9951	9952	9953	9954	9955	
2.0	9.9956	9957	9958	9959	9960	9961	9962	9963	9964	9965	
1	9.9965	9966	9967	9968	9968	9969	9970	9971	9971	9972	
2	9 9973	9973	9974	9974	9975	9976	9976	9977	9977	9978	
3	9.9978	9979	9979	9980	9980	9981	9981	9981	9982	9982	
4	9.9983	9983	9983	9984	9984	9985	9985	9985	9986	9986	
5	9.9986	9987	9987	9987	9987	9988	9988	9988	9989	9989	
6	9 9989	9989	9990	9990	9990	9990	9990	9991	9991	9991	
7	9.9991	9992	9992	9992	9992	9992	9992	9993	9993	9993	
8	9.9993	9993	9993	9994	9994	9994	9994	9994	9994	9994	
9	9.9995	9995	9995	9995	9995	9995	9995	9995	9995	9996	
3.	9.9996	9997	9997	9998	9998	9999	9999	9999	9999	9999	
4.	10.0000										

7	
1	0.7
2	1.4
3	2.1
4	2.8
5	3.5
6	4.2
7	4.9
8	5.6
9	6.3

6	
1	0.6
2	1.2
3	1.8
4	2.4
5	3.0
6	3.6
7	4.2
8	4.8
9	5.4

5	
1	0.5
2	1.0
3	1.5
4	2.0
5	2.5
6	3.0
7	3.5
8	4.0
9	4.5

TAFEL VII.

DIE NATÜRLICHEN

SINUS UND TANGENTEN

FÜR

JEDEN ZEHNTELGRAD

DES

QUADRANTEN.

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
0.0	0.0000		0.0000		inf.		1.0000		90.0	
		17		17				0		
1	0.0017		0.0017		572.9572		1.0000		9	
		18		18				0		
2	0.0035		0.0035		286.4777		1.0000		8	
		17		17				0		
3	0.0052		0.0052		190.9842		1.0000		7	
		18		18				0		
4	0.0070		0.0070		143.2371		1.0000		6	
		17		17				0		
5	0.0087		0.0087		114.5887		1.0000		5	
		18		18				1		
6	0.0105		0.0105		95.4895		0.9999		4	
		17		17				0		
7	0.0122		0.0122		81.8470		0.9999		3	
		18		18				0		
8	0.0140		0.0140		71.6151		0.9999		2	
		17		17				0		
9	0.0157		0.0157		63.6567		0.9999		1	
		18		18				1		
1.0	0.0175		0.0175		57.2900		0.9998		89.0	
		17		17				0		
1	0.0192		0.0192		52.0807		0.9998		9	
		17		17				0		
2	0.0209		0.0209		47.7395		0.9998		8	
		18		18				1		
3	0.0227		0.0227		44 0661		0.9997		7	
		17		17				0		
4	0 0244		0.0244		40.9174		0.9997		6	
		18		18				0		
5	0.0262		0.0262		38.1885		0.9997		5	
		17		17				1		
6	0.0279		0.0279		35.8006		0.9996		4	
		18		18				0		
7	0.0297		0.0297		33.6935		0.9996		3	
		17		17				1		
8	0.0314		0.0314		31.8205		0.9995		2	
		18		18				0		
9	0.0332		0.0332		30.1446		0.9995		1	
		17		17				1		
2.0	0.0349		0.0349		28.6363		0.9994		88.0	
		17		18				1		
1	0.0366		0.0367		27.2715		0.9993		9	
		18		17				0		
2	0.0384		0.0384		26.0307		0.9993		8	
		17		18				1		
3	0.0401		0.0402		24.8978		0.9992		7	
		18		17				1		
4	0.0419		0.0419		23.8593		0.9991		6	
		17		18				1		
5	0.0436		0.0437		22.9038	9555	0.9990		5	
		18		17		8821		0		
6	0.0454		0.0454		22.0217		0.9990		4	
		17		18		8168		1		
7	0.0471		0.0472		21.2049		0.9989		3	
		17		17		7584		1		
8	0.0488		0.0489		20.4465		0.9988		2	
		18		18		7062		1		
9	0.0506		0 0507		19.7403		0.9987		1	
		17		17		6592		1		
3.0	0.0523		0.0524		19 0811		0.9986		87.0	
		18		18		6166		1		
1	0.0541		0.0542		18.4645		0.9985		9	
		17		17		5782		1		
2	0.0558		0.0559		17.8863		0.9984		8	
		18		18		5431		1		
3	0.0576		0.0577		17.3432		0.9983		7	
		17		17		5113		1		
4	0 0593		0.0594		16.8319		0.9982		6	
		17		18		4820		1		
5	0.0610		0 0612		16.3499		0.9981		5	
		18		17		4554		1		
6	0.0628		0.0629		15.8945		0.9980		4	
		17		18		4307		1		
7	0.0645		0 0647		15.4638		0.9979		3	
		18		17		4081		1		
8	0.0663		0.0664		15.0557		0.9978		2	
		17		18		3872		1		
9	0.0680		0.0682		14.6685		0.9977		1	
		18		17		3678		1		
4.0	0.0698		0.0699		14.3007		0.9976		86.0	
		17		18		3500		2		
1	0.0715		0.0717		13.9507		0.9974		9	
		17		17		3333		1		
2	0.0732		0.0734		13.6174		0.9973		8	
		18		18		3179		1		
3	0.0750		0.0752		13.2995		0.9972		7	
		17		17		3033		1		
4	0.0767		0.0769		12.9962		0.9971		6	
		18		18		2900		2		
5	0.0785		0.0787		12.7062		0.9969		5	
		17		18		2774		1		
6	0.0802		0.0805		12.4288		0.9968		4	
		17		17		2666		2		
7	0.0819		0.0822		12.1622		0.9966		3	
		18		18		2535		1		
8	0.0837		0.0840		11.9087		0 9965		2	
		17		17		2442		2		
9	0.0854		0.0857		11.6645		0.9963		1	
		18		18		2344		1		
5.0	0.0872		0.0875		11.4301		0.9962		85.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	P. P.

	18
1	1.8
2	3.6
3	5.4
4	7.2
5	9.0
6	10.8
7	12.6
8	14.4
9	16.2

	17
1	1.7
2	3.4
3	5.1
4	6.8
5	8.5
6	10.2
7	11.9
8	13.6
9	15.3

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
5.0	0.0872		0.0875		11.4301		0.9962		85.0	
		17		17		2253		2		
1	0.0889		0.0892		11.2048		0.9960		9	
2	0.0906	17	0.0910	18	10.9882	2166	0.9959	1	8	
3	0.0924	18	0.0928	18	10.7797	2085	0.9957	2	7	
		17		17		2008		1		
4	0.0941		0.0945		10 5789		0.9956		6	
5	0.0958	17	0.0963	18	10.3854	1935	0.9954	2	5	
6	0.0976	18	0.0981	18	10.1988	1866	0.9952	2	4	
		17		17		1801		1		
7	0.0993		0.0998		10.0187		0.9951		3	
8	0.1011	18	0.1016	18	9.8448	1739	0.9949	2	2	
9	0.1028	17	0.1033	17	9.6768	1680	0.9947	2	1	
		17		18		1624		2		
6.0	0.1045		0.1051		9.5144		0.9945		84.0	
		18		18		1572		2		
1	0.1063		0.1069		9.3572		0.9943		9	
2	0.1080	17	0.1086	17	9.2052	1520	0.9942	1	8	
3	0.1097	17	0.1104	18	9.0579	1473	0.9940	2	7	
		18		18		1427		2		
4	0.1115		0.1122		8.9152		0.9938		6	
5	0.1132	17	0.1139	17	8.7769	1383	0.9936	2	5	
6	0.1149	17	0.1157	18	8.6427	1342	0.9934	2	4	
		18		18		1301		2		
7	0.1167		0.1175		8.5126		0.9932		3	
8	0.1184	17	0.1192	17	8.3863	1263	0.9930	2	2	
9	0.1201	17	0.1210	18	8.2636	1227	0.9928	2	1	
		18		18		1193		3		
7.0	0.1219		0 1228		8.1443		0.9925		83.0	
		17		18		1158		2		
1	0.1236		0.1246		8.0285		0.9923		9	
2	0.1253	17	0.1263	17	7.9158	1127	0.9921	2	8	
3	0.1271	18	0.1281	18	7.8062	1096	0.9919	2	7	
		17		18		1066		2		
4	0.1288		0.1299		7.6996		0.9917		6	
5	0.1305	17	0.1317	18	7.5958	1038	0.9914	3	5	
6	0.1323	18	0.1334	17	7.4947	1011	0.9912	2	4	
		17		18		985		2		
7	0.1340		0.1352		7.3962		0.9910		3	
8	0.1357	17	0.1370	18	7.3002	960	0 9907	3	2	
9	0 1374	17	0.1388	18	7.2066	936	0.9905	2	1	
		18		17		912		2		
8.0	0.1392		0.1405		7.1154		0.9903		82.0	
		17		18		890		3		
1	0.1409		0.1423		7.0264		0.9900		9	
2	0.1426	17	0.1441	18	6.9395	869	0.9898	2	8	
3	0.1444	18	0.1459	18	6.8548	847	0.9895	3	7	
		17		18		828		2		
4	0.1461		0.1477		6.7720		0.9893		6	
5	0.1478	17	0.1495	18	6.6912	808	0.9890	3	5	
6	0.1495	17	0.1512	17	6.6122	790	0.9888	2	4	
		18		18		772		3		
7	0.1513		0.1530		6.5350		0.9885		3	
8	0.1530	17	0.1548	18	6.4596	754	0.9882	3	2	
9	0.1547	17	0.1566	18	6.3859	737	0.9880	2	1	
		17		18		721		3		
9.0	0.1564		0.1584		6.3138		0.9877		81.0	
		18		18		706		3		
1	0.1582		0.1602		6 2432		0.9874		9	
2	0.1599	17	0.1620	18	6.1742	690	0.9871	3	8	
3	0.1616	17	0.1638	18	6.1066	676	0.9869	2	7	
		17		17		661		3		
4	0.1633		0.1655		6.0405		0.9866		6	
5	0.1650	17	0.1673	18	5.9758	647	0.9863	3	5	
6	0.1668	18	0.1691	18	5.9124	634	0.9860	3	4	
		17		18		622		3		
7	0.1685		0.1709		5.8502		0.9857		3	
8	0.1702	17	0.1727	18	5.7894	608	0.9854	3	2	
9	0.1719	17	0.1745	18	5.7297	597	0.9851	3	1	
10.0	0.1736	17	0.1763	18	5.6713	584	0.9848	3	80.0	

P. P.	
	18
1	1.8
2	3.6
3	5.4
4	7.2
5	9.0
6	10.8
7	12.6
8	14.4
9	16.2

P. P.	
	17
1	1.7
2	3.4
3	5.1
4	6.8
5	8.5
6	10.2
7	11.9
8	13.6
9	15.3

	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade

80°—85°

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
10.0	0.1736	18	0.1763	18	5.6713	573	0.9848	3	80.0	
1	0.1754	17	0.1781	18	5.6140	562	0.9845	3	9	
2	0.1771	17	0.1799	18	5.5578	552	0.9842	3	8	
3	0.1788	17	0.1817	18	5.5026	540	0.9839	3	7	
4	0.1805	17	0.1835	18	5.4486	531	0.9836	3	6	
5	0.1822	18	0.1853	18	5.3955	520	0.9833	4	5	
6	0.1840	17	0.1871	19	5.3435	511	0.9829	3	4	
7	0.1857	17	0.1890	18	5.2924	502	0.9826	3	3	19
8	0.1874	17	0.1908	18	5.2422	493	0.9823	3	2	1 1.9
9	0.1891	17	0.1926	18	5.1929	483	0.9820	4	1	2 3.8
11.0	0.1908	17	0.1944	18	5.1446	476	0.9816	3	79.0	3 5.7
1	0.1925	17	0.1962	18	5.0970	466	0.9813	3	9	4 7.6
2	0.1942	17	0.1980	18	5.0504	459	0.9810	4	8	5 9.5
3	0.1959	18	0.1998	18	5.0045	451	0.9806	3	7	6 11.4
4	0.1977	17	0.2016	19	4.9594	442	0.9803	4	6	7 13.3
5	0.1994	17	0.2035	18	4.9152	436	0.9799	3	5	8 15.2
6	0.2011	17	0.2053	18	4.8716	428	0.9796	4	4	9 17.1
7	0.2028	17	0.2071	18	4.8288	421	0.9792	3	3	
8	0.2045	17	0.2089	18	4.7867	414	0.9789	4	2	
9	0.2062	17	0.2107	19	4.7453	407	0.9785	4	1	
12.0	0.2079	17	0.2126	18	4.7046	400	0 9781	3	78.0	
1	0.2096	17	0.2144	18	4.6646	394	0.9778	4	9	
2	0.2113	17	0.2162	18	4.6252	388	0.9774	4	8	18
3	0.2130	17	0.2180	19	4.5864	381	0.9770	3	7	1 1.8
4	0.2147	17	0.2199	18	4.5483	376	0.9767	4	6	2 3.6
5	0.2164	17	0.2217	18	4.5107	370	0.9763	4	5	3 5.4
6	0.2181	17	0.2235	19	4.4737	364	0 9759	4	4	4 7.2
7	0.2198	17	0.2254	18	4.4373	358	0.9755	4	3	5 9.0
8	0.2215	18	0.2272	18	4.4015	353	0.9751	4	2	6 10.8
9	0.2233	17	0.2290	19	4.3662	347	0.9748	4	1	7 12.6
13.0	0.2250	17	0.2309	18	4.3315	343	0.9744	4	77.0	8 14.4
1	0.2267	17	0.2327	18	4.2972	337	0.9740	4	9	9 16.2
2	0 2284	16	0.2345	19	4.2635	332	0.9736	4	8	
3	0.2300	17	0.2364	18	4.2303	327	0.9732	4	7	
4	0.2317	17	0.2382	19	4.1976	323	0.9728	4	6	
5	0.2334	17	0.2401	18	4.1653	318	0.9724	4	5	
6	0.2351	17	0.2419	19	4.1335	313	0.9720	5	4	
7	0.2368	17	0.2438	18	4.1022	309	0.9715	4	3	17
8	0.2385	17	0.2456	19	4.0713	305	0.9711	4	2	1 1.7
9	0.2402	17	0.2475	18	4.0408	300	0.9707	4	1	2 3.4
14.0	0.2419	17	0.2493	19	4.0108	296	0.9703	4	76.0	3 5.1
1	0.2436	17	0.2512	18	3.9812	292	0.9699	4	9	4 6.8
2	0.2453	17	0.2530	19	3.9520	288	0.9694	5	8	5 8.5
3	0.2470	17	0.2549	19	3.9232	285	0.9690	4	7	6 10.2
4	0.2487	17	0.2568	18	3.8947	280	0.9686	4	6	7 11.9
5	0.2504	17	0.2586	19	3.8667	276	0.9681	5	5	8 13.6
6	0.2521	17	0.2605	18	3.8391	273	0.9677	4	4	9 15.3
7	0.2538	16	0.2623	19	3.8118	270	0.9673	4	3	
8	0 2554	17	0.2642	19	3.7848	265	0.9668	5	2	
9	0.2571	17	0.2661	18	3.7583	262	0.9664	4	1	
15.0	0.2588		0.2679		3.7321		0.9659	5	75.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
15.0	0.2588		0.2679		3.7321		0.9659		75.0	
		17		19		259		4		
1	0.2605		0.2698		3.7062		0.9655		9	
		17		19		256		5		
2	0.2622		0.2717		3.6806		0.9650		8	
		17		19		252		4		
3	0.2639		0.2736		3.6554		0.9646		7	
		17		18		249		5		
4	0.2656		0.2754		3.6305		0.9641		6	
		16		19		246		5		19
5	0.2672		0.2773		3.6059		0.9636		5	
		17		19		243		4		1 1.9
6	0.2689		0.2792		3.5816		0.9632		4	2 3.8
		17		19		240		5		3 5.7
7	0.2706		0.2811		3.5576		0.9627		3	4 7.6
		17		19		237		5		5 9.5
8	0.2723		0.2830		3.5339		0.9622		2	6 11.4
		17		19		234		5		7 13.3
9	0.2740		0.2849		3.5105		0.9617		1	8 15.2
		16		18		231		4		9 17.1
16.0	0.2756		0.2867		3.4874		0.9613		74.0	
		17		19		228		5		
1	0.2773		0.2886		3.4646		0.9608		9	
		17		19		226		5		
2	0.2790		0.2905		3.4420		0.9603		8	
		17		19		223		5		
3	0.2807		0.2924		3.4197		0.9598		7	
		16		19		220		5		
4	0.2823		0.2943		3.3977		0.9593		6	
		17		19		218		5		
5	0.2840		0.2962		3.3759		0.9588		5	
		17		19		215		5		
6	0.2857		0.2981		3.3544		0.9583		4	
		17		19		212		5		18
7	0.2874		0.3000		3.3332		0.9578		3	1 1.8
		16		19		210		5		2 3.6
8	0.2890		0.3019		3.3122		0.9573		2	3 5.4
		17		19		208		5		4 7.2
9	0.2907		0.3038		3.2914		0.9568		1	5 9.0
		17		19		205		5		6 10.8
17.0	0.2924		0.3057		3.2709		0.9563		73.0	7 12.6
		16		19		203		5		8 14.4
1	0.2940		0.3076		3.2506		0.9558		9	9 16.2
		17		20		201		5		
2	0.2957		0.3096		3.2305		0.9553		8	
		17		19		199		5		
3	0.2974		0.3115		3.2106		0.9548		7	
		16		19		196		6		
4	0.2990		0.3134		3.1910		0.9542		6	
		17		19		194		5		
5	0.3007		0.3153		3.1716		0.9537		5	
		17		19		192		5		
6	0.3024		0.3172		3.1524		0.9532		4	
		16		19		190		5		
7	0.3040		0.3191		3.1334		0.9527		3	
		17		20		188		6		
8	0.3057		0.3211		3.1146		0.9521		2	17
		17		19		185		5		1 1.7
9	0.3074		0.3230		3.0961		0.9516		1	2 3.4
		16		19		184		5		3 5.1
18.0	0.3090		0.3249		3.0777		0.9511		72.0	4 6.8
		17		20		182		6		5 8.5
1	0.3107		0.3269		3.0595		0.9505		9	6 10.2
		16		19		180		5		7 11.9
2	0.3123		0.3288		3.0415		0.9500		8	8 13.6
		17		19		178		6		9 15.3
3	0.3140		0.3307		3.0237		0.9494		7	
		16		20		176		5		
4	0.3156		0.3327		3.0061		0.9489		6	
		17		19		174		6		
5	0.3173		0.3346		2.9887		0.9483		5	
		17		19		173		5		
6	0.3190		0.3365		2.9714		0.9478		4	
		16		20		170		6		
7	0.3206		0.3385		2.9544		0.9472		3	
		17		19		169		6		
8	0.3223		0.3404		2.9375		0.9466		2	
		16		20		167		5		
9	0.3239		0.3424		2.9208		0.9461		1	
		17		19		166		6		16
19.0	0.3256		0.3443		2.9042		0.9455		71.0	1 1.6
		16		20		164		6		2 3.2
1	0.3272		0.3463		2.8878		0.9449		9	3 4.8
		17		19		162		5		4 6.4
2	0.3289		0.3482		2.8716		0.9444		8	5 8.0
		16		20		160		6		6 9.6
3	0.3305		0.3502		2.8556		0.9438		7	7 11.2
		17		20		159		6		8 12.8
4	0.3322		0.3522		2.8397		0.9432		6	9 14.4
		16		19		158		6		
5	0.3338		0.3541		2.8239		0.9426		5	
		17		20		156		5		
6	0.3355		0.3561		2.8083		0.9421		4	
		16		20		154		6		
7	0.3371		0.3581		2.7929		0.9415		3	
		16		19		153		6		
8	0.3387		0.3600		2.7776		0.9409		2	
		17		20		151		6		
9	0.3404		0.3620		2.7625		0.9403		1	
		16		20		150		6		
20.0	0.3420		0.3640		2.7475		0.9397		70.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.	
20.0	0.3420	17	0.3640	19	2.7475	149	0.9397	6	70.0		
1	0.3437	16	0.3659	20	2.7326	147	0.9391	6	9		
2	0.3453	16	0.3679	20	2.7179	145	0.9385	6	8		
3	0.3469	17	0.3699	20	2.7034	145	0.9379	6	7		
4	0.3486	16	0.3719	20	2.6889	143	0.9373	6	6		
5	0.3502	16	0.3739	20	2.6746	141	0.9367	6	5		22
6	0.3518	17	0.3759	20	2.6605	141	0.9361	7	4	1	2.2
7	0.3535	16	0.3779	20	2.6464	139	0.9354	6	3	2	4.4
8	0.3551	16	0.3799	20	2.6325	138	0.9348	6	2	3	6.6
9	0.3567	17	0.3819	20	2.6187	136	0.9342	6	1	4	8.8
21.0	0.3584	16	0.3839	20	2.6051	135	0.9336	6	69.0	5	11.0
1	0.3600	16	0.3859	20	2.5916	134	0.9330	7	9	6	13.2
2	0.3616	17	0.3879	20	2.5782	133	0.9323	6	8	7	15.4
3	0.3633	16	0.3899	20	2.5649	132	0.9317	6	7	8	17.6
4	0.3649	16	0.3919	20	2.5517	131	0.9311	7	6	9	19.8
5	0.3665	16	0.3939	20	2.5386	129	0.9304	6	5		
6	0.3681	16	0.3959	20	2.5257	128	0.9298	7	4		21
7	0.3697	17	0.3979	21	2.5129	127	0.9291	6	3	1	2.1
8	0.3714	16	0.4000	20	2.5002	126	0.9285	7	2	2	4.2
9	0.3730	16	0.4020	20	2.4876	125	0.9278	6	1	3	6.3
22.0	0.3746	16	0.4040	21	2.4751	124	0.9272	7	68.0	4	8.4
1	0.3762	16	0.4061	20	2.4627	123	0.9265	6	9	5	10.5
2	0.3778	17	0.4081	20	2.4504	121	0.9259	7	8	6	12.6
3	0.3795	16	0.4101	21	2.4383	121	0.9252	7	7	7	14.7
4	0.3811	16	0.4122	20	2.4262	120	0.9245	6	6	8	16.8
5	0.3827	16	0.4142	21	2.4142	119	0.9239	7	5	9	18.9
6	0.3843	16	0.4163	20	2.4023	117	0.9232	7	4		
7	0.3859	16	0.4183	21	2.3906	117	0.9225	6	3		17
8	0.3875	16	0.4204	20	2.3789	116	0.9219	7	2	1	1.7
9	0.3891	16	0.4224	21	2.3673	114	0.9212	7	1	2	3.4
23.0	0.3907	16	0.4245	20	2.3559	114	0.9205	7	67.0	3	5.1
1	0.3923	16	0.4265	21	2.3445	113	0.9198	7	9	4	6.8
2	0.3939	16	0.4286	21	2.3332	112	0.9191	7	8	5	8.5
3	0.3955	16	0.4307	20	2.3220	111	0.9184	6	7	6	10.2
4	0.3971	16	0.4327	21	2.3109	111	0.9178	7	6	7	11.9
5	0.3987	16	0.4348	21	2.2998	109	0.9171	7	5	8	13.6
6	0.4003	16	0.4369	21	2.2889	108	0.9164	7	4	9	15.3
7	0.4019	16	0.4390	21	2.2781	108	0.9157	7	3		
8	0.4035	16	0.4411	20	2.2673	107	0.9150	7	2		
9	0.4051	16	0.4431	21	2.2566	106	0.9143	8	1		16
24.0	0.4067	16	0.4452	21	2.2460	105	0.9135	7	66.0	1	1.6
1	0.4083	16	0.4473	21	2.2355	104	0.9128	7	9	2	3.2
2	0.4099	16	0.4494	21	2.2251	103	0.9121	7	8	3	4.8
3	0.4115	16	0.4515	21	2.2148	103	0.9114	7	7	4	6.4
4	0.4131	16	0.4536	21	2.2045	102	0.9107	7	6	5	8.0
5	0.4147	16	0.4557	21	2.1943	101	0.9100	8	5	6	9.6
6	0.4163	16	0.4578	21	2.1842	100	0.9092	7	4	7	11.2
7	0.4179	16	0.4599	22	2.1742	100	0.9085	7	3	8	12.8
8	0.4195	15	0.4621	21	2.1642	99	0.9078	8	2	9	14.4
9	0.4210	16	0.4642	21	2.1543	98	0.9070	7	1		
25.0	0.4226		0.4663		2.1445		0.9063		65.0		
	Cosin.	d.	Cotang.	d.	Tang	d.	Sinus.	d	Grade		

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
25.0	0.4226	16	0.4663	21	2.1445	97	0.9063	7	65.0	
1	0.4242	16	0.4684	22	2.1348	97	0.9056	8	9	
2	0.4258	16	0.4706	21	2.1251	96	0.9048	7	8	
3	0.4274	15	0.4727	21	2.1155	95	0.9041	8	7	
4	0.4289	16	0.4748	22	2.1060	95	0.9033	7	6	
5	0.4305	16	0.4770	21	2.0965	93	0.9026	8	5	23
6	0.4321	16	0.4791	22	2.0872	94	0.9018	7	4	1 2.3
7	0.4337	15	0.4813	21	2.0778	92	0.9011	8	3	2 4.6
8	0.4352	16	0.4834	22	2.0686	92	0.9003	7	2	3 6.9
9	0.4368	16	0.4856	21	2.0594	91	0.8996	8	1	4 9.2
26.0	0.4384	15	0.4877	22	2.0503	90	0.8988	8	64.0	5 11.5 6 13.8 7 16.1 8 18.4 9 20.7
1	0.4399	16	0.4899	22	2.0413	90	0.8980	7	9	
2	0.4415	16	0.4921	21	2.0323	90	0.8973	8	8	
3	0.4431	15	0.4942	22	2.0233	88	0.8965	8	7	
4	0.4446	16	0.4964	22	2.0145	88	0.8957	8	6	
5	0.4462	16	0.4986	22	2.0057	87	0.8949	7	5	
6	0.4478	15	0.5008	21	1.9970	87	0.8942	8	4	22
7	0.4493	16	0.5029	22	1.9883	86	0.8934	8	3	1 2.2
8	0.4509	15	0.5051	22	1.9797	86	0.8926	8	2	2 4.4
9	0.4524	16	0.5073	22	1.9711	85	0.8918	8	1	3 6.6 4 8.8
27.0	0.4540	15	0.5095	22	1.9626	84	0.8910	8	63.0	5 11.0 6 13.2 7 15.4 8 17.6 9 19.8
1	0.4555	16	0.5117	22	1.9542	84	0.8902	8	9	
2	0.4571	15	0.5139	22	1.9458	83	0.8894	8	8	
3	0.4586	16	0.5161	23	1.9375	83	0.8886	8	7	
4	0.4602	15	0.5184	22	1.9292	82	0.8878	8	6	
5	0.4617	16	0.5206	22	1.9210	82	0.8870	8	5	
6	0.4633	15	0.5228	22	1.9128	81	0.8862	8	4	
7	0.4648	16	0.5250	22	1.9047	80	0.8854	8	3	16
8	0.4664	15	0.5272	23	1.8967	80	0.8846	8	2	1 1.6
9	0.4679	16	0.5295	22	1.8887	80	0.8838	9	1	2 3.2
28.0	0.4695	15	0.5317	23	1.8807	79	0.8829	8	62.0	3 4.8 4 6.4 5 8.0 6 9.6 7 11.2 8 12.8 9 14.4
1	0.4710	16	0.5340	22	1.8728	78	0.8821	8	9	
2	0.4726	15	0.5362	22	1.8650	78	0.8813	8	8	
3	0.4741	15	0.5384	23	1.8572	77	0.8805	9	7	
4	0.4756	16	0.5407	23	1.8495	77	0.8796	8	6	
5	0.4772	15	0.5430	22	1.8418	77	0.8788	8	5	
6	0.4787	15	0.5452	23	1.8341	76	0.8780	9	4	
7	0.4802	16	0.5475	23	1.8265	75	0.8771	8	3	
8	0.4818	15	0.5498	22	1.8190	75	0.8763	8	2	
9	0.4833	15	0.5520	23	1.8115	75	0.8755	9	1	15
29.0	0.4848	15	0.5543	23	1.8040	74	0.8746	8	61.0	1 1.5 2 3.0 3 4.5 4 6.0 5 7.5 6 9.0 7 10.5 8 12.0 9 13.5
1	0.4863	16	0.5566	23	1.7966	73	0.8738	9	9	
2	0.4879	15	0.5589	23	1.7893	73	0.8729	8	8	
3	0.4894	15	0.5612	23	1.7820	73	0.8721	9	7	
4	0.4909	15	0.5635	23	1.7747	72	0.8712	8	6	
5	0.4924	15	0.5658	23	1.7675	72	0.8704	9	5	
6	0.4939	16	0.5681	23	1.7603	71	0.8695	9	4	
7	0.4955	15	0.5704	23	1.7532	71	0.8686	8	3	
8	0.4970	15	0.5727	23	1.7461	70	0.8678	9	2	
9	0.4985	15	0.5750	24	1.7391	70	0.8669	9	1	
30.0	0.5000		0.5774		1.7321		0.8660		60.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P. P.
30.0	0.5000	15	0.5774	23	1.7321	70	0.8660	8	60.0	
1	0.5015	15	0.5797	23	1.7251	69	0.8652	9	9	
2	0.5030	15	0.5820	24	1.7182	69	0.8643	9	8	
3	0.5045	15	0.5844	23	1.7113	68	0.8634	9	7	24
4	0.5060	15	0.5867	23	1.7045	68	0.8625	9	6	1 2.4 2 4.8
5	0.5075	15	0.5890	24	1.6977	68	0.8616	9	5	3 7.2 4 9.6
6	0.5090	15	0.5914	24	1.6909	67	0.8607	8	4	5 12.0 6 14.4
7	0.5105	15	0.5938	23	1.6842	67	0.8599	9	3	7 16.8 8 19.2
8	0.5120	15	0.5961	24	1.6775	66	0.8590	9	2	9 21.6
9	0.5135	15	0.5985	24	1.6709	66	0.8581	9	1	
31.0	0.5150	15	0.6009	23	1.6643	66	0.8572	9	59.0	
1	0.5165	15	0.6032	24	1.6577	65	0.8563	9	9	
2	0.5180	15	0.6056	24	1.6512	65	0.8554	9	8	25
3	0.5195	15	0.6080	24	1.6447	64	0.8545	9	7	1 2.5
4	0.5210	15	0.6104	24	1.6383	64	0.8536	10	6	2 5.0 3 7.5
5	0.5225	15	0.6128	24	1.6319	64	0.8526	9	5	4 10.0 5 12.5
6	0.5240	15	0.6152	24	1.6255	64	0.8517	9	4	6 15.0 7 17.5
7	0.5255	15	0.6176	24	1.6191	63	0.8508	9	3	8 20.0 9 22.5
8	0.5270	14	0.6200	24	1.6128	62	0.8499	9	2	
9	0.5284	15	0.6224	25	1.6066	63	0.8490	10	1	
32.0	0.5299	15	0.6249	24	1.6003	62	0.8480	9	58.0	
1	0.5314	15	0.6273	24	1.5941	61	0.8471	9	9	
2	0.5329	15	0.6297	25	1.5880	62	0.8462	9	8	26
3	0.5344	14	0.6322	24	1.5818	61	0.8453	10	7	1 2.6
4	0.5358	15	0.6346	25	1.5757	60	0.8443	9	6	2 5.2 3 7.8
5	0.5373	15	0.6371	24	1.5697	60	0.8434	9	5	4 10.4 5 13.0
6	0.5388	14	0.6395	25	1.5637	60	0.8425	10	4	6 15.6 7 18.2
7	0.5402	15	0.6420	25	1.5577	60	0.8415	9	3	8 20.8 9 23.4
8	0.5417	15	0.6445	24	1.5517	59	0.8406	10	2	
9	0.5432	14	0.6469	25	1.5458	59	0.8396	9	1	
33.0	0.5446	15	0.6494	25	1.5399	59	0.8387	10	57.0	
1	0.5461	15	0.6519	25	1.5340	58	0.8377	9	9	
2	0.5476	14	0.6544	25	1.5282	58	0.8368	10	8	15
3	0.5490	15	0.6569	25	1.5224	58	0.8358	10	7	1 1.5
4	0.5505	14	0.6594	25	1.5166	58	0.8348	9	6	2 3.0 3 4.5
5	0.5519	15	0.6619	25	1.5108	57	0.8339	10	5	4 6.0 5 7.5
6	0.5534	14	0.6644	25	1.5051	57	0.8329	9	4	6 9.0 7 10.5
7	0.5548	15	0.6669	25	1.4994	56	0.8320	10	3	8 12.0 9 13.5
8	0.5563	14	0.6694	26	1.4938	56	0.8310	10	2	
9	0.5577	15	0.6720	25	1.4882	56	0.8300	10	1	
34.0	0.5592	14	0.6745	26	1.4826	56	0.8290	9	56.0	
1	0.5606	15	0.6771	25	1.4770	55	0.8281	10	9	
2	0.5621	14	0.6796	26	1.4715	56	0.8271	10	8	14
3	0.5635	15	0.6822	25	1.4659	54	0.8261	10	7	1 1.4
4	0.5650	14	0.6847	26	1.4605	55	0.8251	10	6	2 2.8 3 4.2
5	0.5664	14	0.6873	26	1.4550	54	0.8241	10	5	4 5.6 5 7.0
6	0.5678	15	0.6899	25	1.4496	54	0.8231	10	4	6 8.4 7 9.8
7	0.5693	14	0.6924	26	1.4442	54	0.8221	10	3	8 11.2 9 12.6
8	0.5707	14	0.6950	26	1.4388	54	0.8211	10	2	
9	0.5721	15	0.6976	26	1.4335	53	0.8202	9	1	
35.0	0.5736		0.7002		1.4281	54	0.8192	10	55.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	

Grade	Sinus.	d.	Tang.	d.	Cotang.	d.	Cosin.	d.		P.	P.
35.0	0.5736		0.7002		1.4281		0.8192		55.0		
		14		26		52		11			
1	0.5750		0.7028		1.4229		0.8181		9		
		14		26		53		10			
2	0.5764		0.7054		1.4176		0.8171		8		
		15		26		52		10			27
3	0.5779		0.7080		1.4124		0.8161		7		
		14		27		53		10		1	2.7
4	0.5793		0.7107		1.4071		0.8151		6	2	5.4
		14		26		52		10		3	8.1
5	0.5807		0.7133		1.4019		0.8141		5	4	10.8
		14		26		51		10		5	13.5
6	0.5821		0.7159		1.3968		0.8131		4	6	16.2
		14		27		52		10		7	18.9
7	0.5835		0.7186		1.3916		0.8121		3	8	21.6
		15		26		51		10		9	24.3
8	0.5850		0.7212		1.3865		0.8111		2		
		14		27		51		11			
9	0.5864		0.7239		1.3814		0.8100		1		
		14		26		50		10			
36.0	0.5878		0.7265		1.3764		0.8090		54.0		
		14		27		51		10			
1	0.5892		0.7292		1.3713		0.8080		9		
		14		27		50		10			
2	0.5906		0.7319		1.3663		0.8070		8		
		14		27		50		11			28
3	0.5920		0.7346		1.3613		0.8059		7		
		14		27		49		10		1	2.8
4	0.5934		0.7373		1.3564		0.8049		6	2	5.6
		14		27		50		10		3	8.4
5	0.5948		0.7400		1.3514		0.8039		5	4	11.2
		14		27		49		11		5	14.0
6	0.5962		0.7427		1.3465		0.8028		4	6	16.8
		14		27		49		10		7	19.6
7	0.5976		0.7454		1.3416		0.8018		3	8	22.4
		14		27		49		11		9	25.2
8	0.5990		0.7481		1.3367		0.8007		2		
		14		27		48		10			
9	0.6004		0.7508		1.3319		0.7997		1		
		14		28		49		11			
37.0	0.6018		0.7536		1.3270		0.7986		53.0		
		14		27		48		10			
1	0.6032		0.7563		1.3222		0.7976		9		
		14		27		47		11			
2	0.6046		0.7590		1.3175		0.7965		8		
		14		28		48		10			29
3	0.6060		0.7618		1.3127		0.7955		7		
		14		28		48		11		1	2.9
4	0.6074		0.7646		1.3079		0.7944		6	2	5.8
		14		27		47		10		3	8.7
5	0.6088		0.7673		1.3032		0.7934		5	4	11.6
		13		28		47		11		5	14.5
6	0.6101		0.7701		1.2985		0.7923		4	6	17.4
		14		28		47		11		7	20.3
7	0.6115		0.7729		1.2938		0.7912		3	8	23.2
		14		28		46		10		9	26.1
8	0.6129		0.7757		1.2892		0.7902		2		
		14		28		46		11			
9	0.6143		0.7785		1.2846		0.7891		1		
		14		28		47		11			
38.0	0.6157		0.7813		1.2799		0 7880		52.0		
		13		28		46		11			
1	0.6170		0.7841		1.2753		0.7869		9		
		14		28		45		10			
2	0.6184		0.7869		1.2708		0.7859		8		14
		14		29		46		11			
3	0.6198		0.7898		1.2662		0.7848		7	1	1.4
		13		28		45		11		2	2.8
4	0.6211		0.7926		1.2617		0.7837		6	3	4.2
		14		28		45		11		4	5.6
5	0.6225		0.7954		1.2572		0.7826		5	5	7.0
		14		29		45		11		6	8.4
6	0.6239		0.7983		1.2527		0.7815		4	7	9.8
		13		29		45		11		8	11.2
7	0.6252		0.8012		1.2482		0.7804		3	9	12.6
		14		28		45		11			
8	0.6266		0.8040		1.2437		0.7793		2		
		14		29		44		11			
9	0.6280		0.8069		1.2393		0.7782		1		
		13		29		44		11			
39.0	0.6293		0.8098		1.2349		0.7771		51.0		
		14		29		44		11			
1	0.6307		0.8127		1.2305		0.7760		9		
		13		29		44		11			13
2	0.6320		0.8156		1.2261		0.7749		8		
		14		29		43		11		1	1.3
3	0.6334		0.8185		1.2218		0.7738		7	2	2.6
		13		29		44		11		3	3.9
4	0.6347		0.8214		1.2174		0.7727		6	4	5.2
		14		29		43		11		5	6.5
5	0.6361		0.8243		1.2131		0.7716		5	6	7.8
		13		30		43		11		7	9.1
6	0.6374		0.8273		1.2088		0.7705		4	8	10.4
		14		29		43		11		9	11.7
7	0.6388		0.8302		1.2045		0.7694		3		
		13		30		43		11			
8	0.6401		0.8332		1.2002		0.7683		2		
		13		29		42		11			
9	0.6414		0.8361		1.1960		0.7672		1		
		14		30		42		12			
40.0	0.6428		0.8391		1.1918		0.7660		50.0		
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade		

Grade	Sinus	d.	Tang.	d.	Cotang.	d.	Cosinus	d.		P. P.
40.0	0.6428		0.8391		1.1918		0.7660		50.0	
		13		30		43		11		
1	0.6441		0.8421		1.1875		0.7649		9	
		14		30		42		11		
2	0.6455		0.8451		1.1833		0.7638		8	
		13		30		41		11		31
3	0.6468		0.8481		1.1792		0.7627		7	
		13		30		42		12		1 3.1
4	0.6481		0.8511		1.1750		0.7615		6	2 6.2
		13		30		42		11		3 9.3
5	0.6494		0.8541		1.1708		0.7604		5	4 12.4
		14		30		41		11		5 15.5
6	0.6508		0.8571		1.1667		0.7593		4	6 18.6
		13		30		41		12		7 21.7
7	0.6521		0.8601		1.1626		0.7581		3	8 24.8
		13		31		41		11		9 27.9
8	0.6534		0.8632		1.1585		0.7570		2	
		13		30		41		11		
9	0.6547		0 8662		1.1544		0.7559		1	
		14		31		40		12		
41.0	0.6561		0.8693		1.1504		0.7547		49.0	
		13		31		41		11		
1	0.6574		0.8724		1.1463		0.7536		9	
		13		30		40		12		
2	0.6587		0.8754		1.1423		0.7524		8	
		13		31		40		11		32
3	0.6600		0.8785		1.1383		0.7513		7	
		13		31		40		12		1 3.2
4	0.6613		0.8816		1.1343		0.7501		6	2 6.4
		13		31		40		11		3 9.6
5	0.6626		0.8847		1.1303		0.7490		5	4 12.8
		13		31		40		12		5 16.0
6	0.6639		0.8878		1.1263		0.7478		4	6 19.2
		13		32		39		12		7 22.4
7	0.6652		0.8910		1.1224		0.7466		3	8 25.6
		13		31		40		11		9 28.8
8	0 6665		0.8941		1.1184		0.7455		2	
		13		31		39		12		
9	0.6678		0.8972		1.1145		0.7443		1	
		13		32		39		12		
42.0	0.6691		0.9004		1.1106		0.7431		48.0	
		13		32		39		11		
1	0.6704		0.9036		1.1067		0.7420		9	
		13		31		39		12		
2	0.6717		0.9067		1.1028		0.7408		8	
		13		32		38		12		33
3	0.6730		0.9099		1.0990		0.7396		7	
		13		32		39		11		1 3.3
4	0.6743		0.9131		1.0951		0 7385		6	2 6.6
		13		32		38		12		3 9.9
5	0.6756		0.9163		1.0913		0.7373		5	4 13.2
		13		32		38		12		5 16.5
6	0.6769		0.9195		1.0875		0.7361		4	6 19.8
		13		33		38		12		7 23.1
7	0.6782		0.9228		1.0837		0.7349		3	8 26.4
		12		32		38		12		9 29.7
8	0.6794		0.9260		1.0799		0.7337		2	
		13		33		38		12		
9	0.6807		0.9293		1.0761		0.7325		1	
		13		32		37		11		
43.0	0.6820		0.9325		1.0724		0.7314		47.0	
		13		33		38		12		
1	0.6833		0.9358		1.0686		0.7302		9	
		12		33		37		12		
2	0.6845		0.9391		1.0649		0.7290		8	34
		13		33		37		12		
3	0.6858		0.9424		1.0612		0.7278		7	1 3.4
		13		33		37		12		2 6.8
4	0.6871		0.9457		1.0575		0.7266		6	3 10.2
		13		33		37		12		4 13.6
5	0.6884		0.9490		1.0538		0.7254		5	5 17.0
		12		33		37		12		6 20.4
6	0.6896		0.9523		1.0501		0.7242		4	7 23.8
		13		33		37		12		8 27.2
7	0.6909		0.9556		1.0464		0.7230		3	9 30.6
		12		34		36		12		
8	0.6921		0.9590		1.0428		0.7218		2	
		13		33		36		12		
9	0.6934		0.9623		1.0392		0.7206		1	
		13		34		37		13		
44.0	0.6947		0.9657		1.0355		0.7193		46.0	
		12		34		36		12		
1	0.6959		0.9691		1.0319		0.7181		9	
		13		34		36		12		
2	0.6972		0.9725		1.0283		0 7169		8	13
		12		34		36		12		
3	0.6984		0.9759		1.0247		0.7157		7	1 1.3
		13		34		35		12		2 2.6
4	0.6997		0.9793		1.0212		0.7145		6	3 3.9
		12		34		36		12		4 5.2
5	0.7009		0.9827		1.0176		0.7133		5	5 6.5
		13		34		35		13		6 7.8
6	0.7022		0.9861		1.0141		0.7120		4	7 9.1
		12		35		36		12		8 10.4
7	0.7034		0.9896		1.0105		0.7108		3	9 11.7
		12		34		35		12		
8	0.7046		0.9930		1.0070		0.7096		2	
		13		35		35		13		
9	0.7059		0.9965		1.0035		0.7083		1	
		12		35		35		12		
45.0	0.7071		1.0000		1.0000		0.7071		45.0	
	Cosin.	d.	Cotang.	d.	Tang.	d.	Sinus.	d.	Grade	

TAFEL VIII.

DIE

QUADRATE DER ZAHLEN.

VON 0,000 BIS 3,500.

N.	N^2 0	1	2	3	4	5	6	7	8	9	P. P.
0.00	0. 0000	0000	0000	0000	0000	0000	0000	0000	0001	0001	
01	0001	0001	0001	0002	0002	0002	0003	0003	0003	0004	
02	0004	0004	0005	0005	0006	0006	0007	0007	0008	0008	
03	0009	0010	0010	0011	0012	0012	0013	0014	0014	0015	
04	0016	0017	0018	0018	0019	0020	0021	0022	0023	0024	
05	0. 0025	0026	0027	0028	0029	0030	0031	0032	0034	0035	
06	0036	0037	0038	0040	0041	0042	0044	0045	0046	0048	
07	0049	0050	0052	0053	0055	0056	0058	0059	0061	0062	
08	0064	0066	0067	0069	0071	0072	0074	0076	0077	0079	
09	0081	0083	0085	0086	0088	0090	0092	0094	0096	0098	
0.10	0. 0100	0102	0104	0106	0108	0110	0112	0114	0117	0119	
11	0121	0123	0125	0128	0130	0132	0135	0137	0139	0142	
12	0144	0146	0149	0151	0154	0156	0159	0161	0164	0166	
13	0169	0172	0174	0177	0180	0182	0185	0188	0190	0193	
14	0196	0199	0202	0204	0207	0210	0213	0216	0219	0222	
15	0. 0225	0228	0231	0234	0237	0240	0243	0246	0250	0253	
16	0256	0259	0262	0266	0269	0272	0276	0279	0282	0286	
17	0289	0292	0296	0299	0303	0306	0310	0313	0317	0320	
18	0324	0328	0331	0335	0339	0342	0346	0350	0353	0357	
19	0361	0365	0369	0372	0376	0380	0384	0388	0392	0396	
0.20	0. 0400	0404	0408	0412	0416	0420	0424	0428	0433	0437	
21	0441	0445	0449	0454	0458	0462	0467	0471	0475	0480	
22	0484	0488	0493	0497	0502	0506	0511	0515	0520	0524	
23	0529	0534	0538	0543	0548	0552	0557	0562	0566	0571	
24	0576	0581	0586	0590	0595	0600	0605	0610	0615	0620	
25	0. 0625	0630	0635	0640	0645	0650	0655	0660	0666	0671	
26	0676	0681	0686	0692	0697	0702	0708	0713	0718	0724	
27	0729	0734	0740	0745	0751	0756	0762	0767	0773	0778	
28	0784	0790	0795	0801	0807	0812	0818	0824	0829	0835	
29	0841	0847	0853	0858	0864	0870	0876	0882	0888	0894	
0.30	0. 0900	0906	0912	0918	0924	0930	0936	0942	0949	0955	
31	0961	0967	0973	0980	0986	0992	0999	1005	1011	1018	
32	1024	1030	1037	1043	1050	1056	1063	1069	1076	1082	
33	1089	1096	1102	1109	1116	1122	1129	1136	1142	1149	
34	1156	1163	1170	1176	1183	1190	1197	1204	1211	1218	
35	0. 1225	1232	1239	1246	1253	1260	1267	1274	1282	1289	
36	1296	1303	1310	1318	1325	1332	1340	1347	1354	1362	
37	1369	1376	1384	1391	1399	1406	1414	1421	1429	1436	
38	1444	1452	1459	1467	1475	1482	1490	1498	1505	1513	
39	1521	1529	1537	1544	1552	1560	1568	1576	1584	1592	
0.40	0. 1600	1608	1616	1624	1632	1640	1648	1656	1665	1673	
41	1681	1689	1697	1706	1714	1722	1731	1739	1747	1756	
42	1764	1772	1781	1789	1798	1806	1815	1823	1832	1840	
43	1849	1858	1866	1875	1884	1892	1901	1910	1918	1927	
44	1936	1945	1954	1962	1971	1980	1989	1998	2007	2016	
45	0. 2025	2034	2043	2052	2061	2070	2079	2088	2098	2107	
46	2116	2125	2134	2144	2153	2162	2172	2181	2190	2200	
47	2209	2218	2228	2237	2247	2256	2266	2275	2285	2294	
48	2304	2314	2323	2333	2343	2352	2362	2372	2381	2391	
49	2401	2411	2421	2430	2440	2450	2460	2470	2480	2490	
0.50	0. 2500	2510	2520	2530	2540	2550	2560	2570	2581	2591	

	2	3
1	0.2	0.3
2	0.4	0.6
3	0.6	0.9
4	0.8	1.2
5	1.0	1.5
6	1.2	1.8
7	1.4	2.1
8	1.6	2.4
9	1.8	2.7

	4	5
1	0.4	0.5
2	0.8	1.0
3	1.2	1.5
4	1.6	2.0
5	2.0	2.5
6	2.4	3.0
7	2.8	3.5
8	3.2	4.0
9	3.6	4.5

	6	7
1	0.6	0.7
2	1.2	1.4
3	1.8	2.1
4	2.4	2.8
5	3.0	3.5
6	3.6	4.2
7	4.2	4.9
8	4.8	5.6
9	5.4	6.3

	8	9
1	0.8	0.9
2	1.6	1.8
3	2.4	2.7
4	3.2	3.6
5	4.0	4.5
6	4.8	5.4
7	5.6	6.3
8	6.4	7.2
9	7.2	8.1

	10	11
1	1.0	1.1
2	2.0	2.2
3	3.0	3.3
4	4.0	4.4
5	5.0	5.5
6	6.0	6.6
7	7.0	7.7
8	8.0	8.8
9	9.0	9.9

N. | N^2 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P.

N.	N² 0	1	2	3	4	5	6	7	8	9
0.50	0. 2500	2510	2520	2530	2540	2550	2560	2570	2581	2591
51	2601	2611	2621	2632	2642	2652	2663	2673	2683	2694
52	2704	2714	2725	2735	2746	2756	2767	2777	2788	2798
53	2809	2820	2830	2841	2852	2862	2873	2884	2894	2905
54	2916	2927	2938	2948	2959	2970	2981	2992	3003	3014
55	0. 3025	3036	3047	3058	3069	3080	3091	3102	3114	3125
56	3136	3147	3158	3170	3181	3192	3204	3215	3226	3238
57	3249	3260	3272	3283	3295	3306	3318	3329	3341	3352
58	3364	3376	3387	3399	3411	3422	3434	3446	3457	3469
59	3481	3493	3505	3516	3528	3540	3552	3564	3576	3588
0.60	0. 3600	3612	3624	3636	3648	3660	3672	3684	3697	3709
61	3721	3733	3745	3758	3770	3782	3795	3807	3819	3832
62	3844	3856	3869	3881	3894	3906	3919	3931	3944	3956
63	3969	3982	3994	4007	4020	4032	4045	4058	4070	4083
64	4096	4109	4122	4134	4147	4160	4173	4186	4199	4212
65	0. 4225	4238	4251	4264	4277	4290	4303	4316	4330	4343
66	4356	4369	4382	4396	4409	4422	4436	4449	4462	4476
67	4489	4502	4516	4529	4543	4556	4570	4583	4597	4610
68	4624	4638	4651	4665	4679	4692	4706	4720	4733	4747
69	4761	4775	4789	4802	4816	4830	4844	4858	4872	4886
0.70	0. 4900	4914	4928	4942	4956	4970	4984	4998	5013	5027
71	5041	5055	5069	5084	5098	5112	5127	5141	5155	5170
72	5184	5198	5213	5227	5242	5256	5271	5285	5300	5314
73	5329	5344	5358	5373	5388	5402	5417	5432	5446	5461
74	5476	5491	5506	5520	5535	5550	5565	5580	5595	5610
75	0. 5625	5640	5655	5670	5685	5700	5715	5730	5746	5761
76	5776	5791	5806	5822	5837	5852	5868	5883	5898	5914
77	5929	5944	5960	5975	5991	6006	6022	6037	6053	6068
78	6084	6100	6115	6131	6147	6162	6178	6194	6209	6225
79	6241	6257	6273	6288	6304	6320	6336	6352	6368	6384
0.80	0. 6400	6416	6432	6448	6464	6480	6496	6512	6529	6545
81	6561	6577	6593	6610	6626	6642	6659	6675	6691	6708
82	6724	6740	6757	6773	6790	6806	6823	6839	6856	6872
83	6889	6906	6922	6939	6956	6972	6989	7006	7022	7039
84	7056	7073	7090	7106	7123	7140	7157	7174	7191	7208
85	0. 7225	7242	7259	7276	7293	7310	7327	7344	7362	7379
86	7396	7413	7430	7448	7465	7482	7500	7517	7534	7552
87	7569	7586	7604	7621	7639	7656	7674	7691	7709	7726
88	7744	7762	7779	7797	7815	7832	7850	7868	7885	7903
89	7921	7939	7957	7974	7992	8010	8028	8046	8064	8082
0.90	0. 8100	8118	8136	8154	8172	8190	8208	8226	8245	8263
91	8281	8299	8317	8336	8354	8372	8391	8409	8427	8446
92	8464	8482	8501	8519	8538	8556	8575	8593	8612	8630
93	8649	8668	8686	8705	8724	8742	8761	8780	8798	8817
94	8836	8855	8874	8892	8911	8930	8949	8968	8987	9006
95	0. 9025	9044	9063	9082	9101	9120	9139	9158	9178	9197
96	9216	9235	9254	9274	9293	9312	9332	9351	9370	9390
97	9409	9428	9448	9467	9487	9506	9526	9545	9565	9584
98	9604	9624	9643	9663	9683	9702	9722	9742	9761	9781
99	0. 9801	9821	9841	9860	9880	9900	9920	9940	9960	9980
1.00	1. 0000	0020	0040	0060	0080	0100	0120	0140	0161	0181

P. P.		
	10	11
1	1.0	1.1
2	2.0	2.2
3	3.0	3.3
4	4.0	4.4
5	5.0	5.5
6	6.0	6.6
7	7.0	7.7
8	8.0	8.8
9	9.0	9.9
	12	13
1	1.2	1.3
2	2.4	2.6
3	3.6	3.9
4	4.8	5.2
5	6.0	6.5
6	7.2	7.8
7	8.4	9.1
8	9.6	10.4
9	10.8	11.7
	14	15
1	1.4	1.5
2	2.8	3.0
3	4.2	4.5
4	5.6	6.0
5	7.0	7.5
6	8.4	9.0
7	9.8	10.5
8	11.2	12.0
9	12.6	13.5
	16	17
1	1.6	1.7
2	3.2	3.4
3	4.8	5.1
4	6.4	6.8
5	8.0	8.5
6	9.6	10.2
7	11.2	11.9
8	12.8	13.6
9	14.4	15.3
	18	19
1	1.8	1.9
2	3.6	3.8
3	5.4	5.7
4	7.2	7.6
5	9.0	9.5
6	10.8	11.4
7	12.6	13.3
8	14.4	15.2
9	16.2	17.1
	20	21
1	2.0	2.1
2	4.0	4.2
3	6.0	6.3
4	8.0	8.4
5	10.0	10.5
6	12.0	12.6
7	14.0	14.7
8	16.0	16.8
9	18.0	18.9

Quadrate der Zahlen von 0,000 bis 3,500.

N.	N² 0	1	2	3	4	5	6	7	8	9	P. P.
1.00	1. 0000	0020	0040	0060	0080	0100	0120	0140	0161	0181	
01	0201	0221	0241	0262	0282	0302	0323	0343	0363	0384	
02	0404	0424	0445	0465	0486	0506	0527	0547	0568	0588	
03	0609	0630	0650	0671	0692	0712	0733	0754	0774	0795	
04	0816	0837	0858	0878	0899	0920	0941	0962	0983	1004	
05	1. 1025	1046	1067	1088	1109	1130	1151	1172	1194	1215	
06	1236	1257	1278	1300	1321	1342	1364	1385	1406	1428	
07	1449	1470	1492	1513	1535	1556	1578	1599	1621	1642	
08	1664	1686	1707	1729	1751	1772	1794	1816	1837	1859	
09	1881	1903	1925	1946	1968	1990	2012	2034	2056	2078	
1.10	1. 2100	2122	2144	2166	2188	2210	2232	2254	2277	2299	
11	2321	2343	2365	2388	2410	2432	2455	2477	2499	2522	
12	2544	2566	2589	2611	2634	2656	2679	2701	2724	2746	
13	2769	2792	2814	2837	2860	2882	2905	2928	2950	2973	
14	2996	3019	3042	3064	3087	3110	3133	3156	3179	3202	
15	1. 3225	3248	3271	3294	3317	3340	3363	3386	3410	3433	
16	3456	3479	3502	3526	3549	3572	3596	3619	3642	3666	
17	3689	3712	3736	3759	3783	3806	3830	3853	3877	3900	
18	3924	3948	3971	3995	4019	4042	4066	4090	4113	4137	
19	4161	4185	4209	4232	4256	4280	4304	4328	4352	4376	
1.20	1. 4400	4424	4448	4472	4496	4520	4544	4568	4593	4617	
21	4641	4665	4689	4714	4738	4762	4787	4811	4835	4860	
22	4884	4908	4933	4957	4982	5006	5031	5055	5080	5104	
23	5129	5154	5178	5203	5228	5252	5277	5302	5326	5351	
24	5376	5401	5426	5450	5475	5500	5525	5550	5575	5600	
25	1. 5625	5650	5675	5700	5725	5750	5775	5800	5826	5851	
26	5876	5901	5926	5952	5977	6002	6028	6053	6078	6104	
27	6129	6154	6180	6205	6231	6256	6282	6307	6333	6358	
28	6384	6410	6435	6461	6487	6512	6538	6564	6589	6615	
29	6641	6667	6693	6718	6744	6770	6796	6822	6848	6874	
1.30	1. 6900	6926	6952	6978	7004	7030	7056	7082	7109	7135	
31	7161	7187	7213	7240	7266	7292	7319	7345	7371	7398	
32	7424	7450	7477	7503	7530	7556	7583	7609	7636	7662	
33	7689	7716	7742	7769	7796	7822	7849	7876	7902	7929	
34	7956	7983	8010	8036	8063	8090	8117	8144	8171	8198	
35	1. 8225	8252	8279	8306	8333	8360	8387	8414	8442	8469	
36	8496	8523	8550	8578	8605	8632	8660	8687	8714	8742	
37	8769	8796	8824	8851	8879	8906	8934	8961	8989	9016	
38	9044	9072	9099	9127	9155	9182	9210	9238	9265	9293	
39	9321	9349	9377	9404	9432	9460	9488	9516	9544	9572	
1.40	1. 9600	9628	9656	9684	9712	9740	9768	9796	9825	9853	
41	1. 9881	9909	9937	9966	9994	0022	0051	0079	0107	0136	
42	2. 0164	0192	0221	0249	0278	0306	0335	0363	0392	0420	
43	0449	0478	0506	0535	0564	0592	0621	0650	0678	0707	
44	0736	0765	0794	0822	0851	0880	0909	0938	0967	0996	
45	2. 1025	1054	1083	1112	1141	1170	1199	1228	1258	1287	
46	1316	1345	1374	1404	1433	1462	1492	1521	1550	1580	
47	1609	1638	1668	1697	1727	1756	1786	1815	1845	1874	
48	1904	1934	1963	1993	2023	2052	2082	2112	2141	2171	
49	2201	2231	2261	2290	2320	2350	2380	2410	2440	2470	
1.50	2. 2500	2530	2560	2590	2620	2650	2680	2710	2741	2771	

	20	21
1	2.0	2.1
2	4.0	4.2
3	6.0	6.3
4	8.0	8.4
5	10.0	10.5
6	12.0	12.6
7	14.0	14.7
8	16.0	16.8
9	18.0	18.9

	22	23
1	2.2	2.3
2	4.4	4.6
3	6.6	6.9
4	8.8	9.2
5	11.0	11.5
6	13.2	13.8
7	15.4	16.1
8	17.6	18.4
9	19.8	20.7

	24	25
1	2.4	2.5
2	4.8	5.0
3	7.2	7.5
4	9.6	10.0
5	12.0	12.5
6	14.4	15.0
7	16.8	17.5
8	19.2	20.0
9	21.6	22.5

	26	27
1	2.6	2.7
2	5.2	5.4
3	7.8	8.1
4	10.4	10.8
5	13.0	13.5
6	15.6	16.2
7	18.2	18.9
8	20.8	21.6
9	23.4	24.3

	28	29
1	2.8	2.9
2	5.6	5.8
3	8.4	8.7
4	11.2	11.6
5	14.0	14.5
6	16.8	17.4
7	19.6	20.3
8	22.4	23.2
9	25.2	26.1

	30	31
1	3.0	3.1
2	6.0	6.2
3	9.0	9.3
4	12.0	12.4
5	15.0	15.5
6	18.0	18.6
7	21.0	21.7
8	24.0	24.8
9	27.0	27.9

N. | N² 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P.

N.	N² 0	1	2	3.	4	5	6	7	8	9	P. P.
1.50	2. 2500	2530	2560	2590	2620	2650	2680	2710	2741	2771	
51	2801	2831	2861	2892	2922	2952	2983	3013	3043	3074	
52	3104	3134	3165	3195	3226	3256	3287	3317	3348	3378	30 31
53	3409	3440	3470	3501	3532	3562	3593	3624	3654	3685	1 3.0 3.1
54	3716	3747	3778	3808	3839	3870	3901	3932	3963	3994	2 6.0 6.2
55	2. 4025	4056	4087	4118	4149	4180	4211	4242	4274	4305	3 9.0 9.3
56	4336	4367	4398	4430	4461	4492	4524	4555	4586	4618	4 12.0 12.4
57	4649	4680	4712	4743	4775	4806	4838	4869	4901	4932	5 15.0 15.5
58	4964	4996	5027	5059	5091	5122	5154	5186	5217	5249	6 18.0 18.6
59	5281	5313	5345	5376	5408	5440	5472	5504	5536	5568	7 21.0 21.7
1.60	2. 5600	5632	5664	5696	5728	5760	5792	5824	5857	5889	8 24.0 24.8
61	5921	5953	5985	6018	6050	6082	6115	6147	6179	6212	9 27.0 27.9
62	6244	6276	6309	6341	6374	6406	6439	6471	6504	6536	
63	6569	6602	6634	6667	6700	6732	6765	6798	6830	6863	32 33
64	6896	6929	6962	6994	7027	7060	7093	7126	7159	7192	1 3.2 3.3
65	2. 7225	7258	7291	7324	7357	7390	7423	7456	7490	7523	2 6.4 6.6
66	7556	7589	7622	7656	7689	7722	7756	7789	7822	7856	3 9.6 9.9
67	7889	7922	7956	7989	8023	8056	8090	8123	8157	8190	4 12.8 13.2
68	8224	8258	8291	8325	8359	8392	8426	8460	8493	8527	5 16.0 16.5
69	8561	8595	8629	8662	8696	8730	8764	8798	8832	8866	6 19.2 19.8
1.70	2. 8900	8934	8968	9002	9036	9070	9104	9138	9173	9207	7 22.4 23.1
71	9241	9275	9309	9344	9378	9412	9447	9481	9515	9550	8 25.6 26.4
72	9584	9618	9653	9687	9722	9756	9791	9825	9860	9894	9 28.8 29.7
73	2. 9929	9964	9998	0033	0068	0102	0137	0172	0206	0241	
74	3. 0276	0311	0346	0380	0415	0450	0485	0520	0555	0590	34 35
75	3. 0625	0660	0695	0730	0765	0800	0835	0870	0906	0941	1 3.4 3.5
76	0976	1011	1046	1082	1117	1152	1188	1223	1258	1294	2 6.8 7.0
77	1329	1364	1400	1435	1471	1506	1542	1577	1613	1648	3 10.2 10.5
78	1684	1720	1755	1791	1827	1862	1898	1934	1969	2005	4 13.6 14.0
79	2041	2077	2113	2148	2184	2220	2256	2292	2328	2364	5 17.0 17.5
1.80	3. 2400	2436	2472	2508	2544	2580	2616	2652	2689	2725	6 20.4 21.0
81	2761	2797	2833	2870	2906	2942	2979	3015	3051	3088	7 23.8 24.5
82	3124	3160	3197	3233	3270	3306	3343	3379	3416	3452	8 27.2 28.0
83	3489	3526	3562	3599	3636	3672	3709	3746	3782	3819	9 30.6 31.5
84	3856	3893	3930	3966	4003	4040	4077	4114	4151	4188	
85	3. 4225	4262	4299	4336	4373	4410	4447	4484	4522	4559	36 37
86	4596	4633	4670	4708	4745	4782	4820	4857	4894	4932	1 3.6 3.7
87	4969	5006	5044	5081	5119	5156	5194	5231	5269	5306	2 7.2 7.4
88	5344	5382	5419	5457	5495	5532	5570	5608	5645	5683	3 10.8 11.1
89	5721	5759	5797	5834	5872	5910	5948	5986	6024	6062	4 14.4 14.8
1.90	3. 6100	6138	6176	6214	6252	6290	6328	6366	6405	6443	5 18.0 18.5
91	6481	6519	6557	6596	6634	6672	6711	6749	6787	6826	6 21.6 22.2
92	6864	6902	6941	6979	7018	7056	7095	7133	7172	7210	7 25.2 25.9
93	7249	7288	7326	7365	7404	7442	7481	7520	7558	7597	8 28.8 29.6
94	7636	7675	7714	7752	7791	7830	7869	7908	7947	7986	9 32.4 33.3
95	3. 8025	8064	8103	8142	8181	8220	8259	8298	8338	8377	
96	8416	8455	8494	8534	8573	8612	8652	8691	8730	8770	38 39
97	8809	8848	8888	8927	8967	9006	9046	9085	9125	9164	1 3.8 3.9
98	9204	9244	9283	9323	9363	9402	9442	9482	9521	9561	2 7.6 7.8
99	9601	9641	9681	9720	9760	9800	9840	9880	9920	9960	3 11.4 11.7
2.00	4. 0000	0040	0080	0120	0160	0200	0240	0280	0321	0361	4 15.2 15.6
											5 19.0 19.5
											6 22.8 23.4
											7 26.6 27.3
											8 30.4 31.2
											9 34.2 35.1
											40 41
											1 4.0 4.1
											2 8.0 8.2
											3 12.0 12.3
											4 16.0 16.4
											5 20.0 20.5
											6 24.0 24.6
											7 28.0 28.7
											8 32.0 32.8
											9 36.0 36.9

N	N² 0	1	2	3	4	5	6	7	8	9	P. P.

N.	N² 0	1	2	3	4	5	6	7	8	9
2.00	4. 0000	0040	0080	0120	0160	0200	0240	0280	0321	0361
01	0401	0441	0481	0522	0562	0602	0643	0683	0723	0764
02	0804	0844	0885	0925	0966	1006	1047	1087	1128	1168
03	1209	1250	1290	1331	1372	1412	1453	1494	1534	1575
04	1616	1657	1698	1738	1779	1820	1861	1902	1943	1984
05	4. 2025	2066	2107	2148	2189	2230	2271	2312	2354	2395
06	2436	2477	2518	2560	2601	2642	2684	2725	2766	2808
07	2849	2890	2932	2973	3015	3056	3098	3139	3181	3222
08	3264	3306	3347	3389	3431	3472	3514	3556	3597	3639
09	3681	3723	3765	3806	3848	3890	3932	3974	4016	4058
2.10	4. 4100	4142	4184	4226	4268	4310	4352	4394	4437	4479
11	4521	4563	4605	4648	4690	4732	4775	4817	4859	4902
12	4944	4986	5029	5071	5114	5156	5199	5241	5284	5326
13	5369	5412	5454	5497	5540	5582	5625	5668	5710	5753
14	5796	5839	5882	5924	5967	6010	6053	6096	6139	6182
15	4. 6225	6268	6311	6354	6397	6440	6483	6526	6570	6613
16	6656	6699	6742	6786	6829	6872	6916	6959	7002	7046
17	7089	7132	7176	7219	7263	7306	7350	7393	7437	7480
18	7524	7568	7611	7655	7699	7742	7786	7830	7873	7917
19	7961	8005	8049	8092	8136	8180	8224	8268	8312	8356
2.20	4. 8400	8444	8488	8532	8576	8620	8664	8708	8753	8797
21	8841	8885	8929	8974	9018	9062	9107	9151	9195	9240
22	9284	9328	9373	9417	9462	9506	9551	9595	9640	9684
23	4. 9729	9774	9818	9863	9908	9952	9997	$\bar{0}042$	$\bar{0}086$	$\bar{0}131$
24	5. 0176	0221	0266	0310	0355	0400	0445	0490	0535	0580
25	5. 0625	0670	0715	0760	0805	0850	0895	0940	0986	1031
26	1076	1121	1166	1212	1257	1302	1348	1393	1438	1484
27	1529	1574	1620	1665	1711	1756	1802	1847	1893	1938
28	1984	2030	2075	2121	2167	2212	2258	2304	2349	2395
29	2441	2487	2533	2578	2624	2670	2716	2762	2808	2854
2.30	5. 2900	2946	2992	3038	3084	3130	3176	3222	3269	3315
31	3361	3407	3453	3500	3546	3592	3639	3685	3731	3778
32	3824	3870	3917	3963	4010	4056	4103	4149	4196	4242
33	4289	4336	4382	4429	4476	4522	4569	4616	4662	4709
34	4756	4803	4850	4896	4943	4990	5037	5084	5131	5178
35	5. 5225	5272	5319	5366	5413	5460	5507	5554	5602	5649
36	5696	5743	5790	5838	5885	5932	5980	6027	6074	6122
37	6169	6216	6264	6311	6359	6406	6454	6501	6549	6596
38	6644	6692	6739	6787	6835	6882	6930	6978	7025	7073
39	7121	7169	7217	7264	7312	7360	7408	7456	7504	7552
2.40	5. 7600	7648	7696	7744	7792	7840	7888	7936	7985	8033
41	8081	8129	8177	8226	8274	8322	8371	8419	8467	8516
42	8564	8612	8661	8709	8758	8806	8855	8903	8952	9000
43	9049	9098	9146	9195	9244	9292	9341	9390	9438	9487
44	5. 9536	9585	9634	9682	9731	9780	9829	9878	9927	9976
45	6. 0025	0074	0123	0172	0221	0270	0319	0368	0418	0467
46	0516	0565	0614	0664	0713	0762	0812	0861	0910	0960
47	1009	1058	1108	1157	1207	1256	1306	1355	1405	1454
48	1504	1554	1603	1653	1703	1752	1802	1852	1901	1951
49	2001	2051	2101	2150	2200	2250	2300	2350	2400	2450
2.50	6. 2500	2550	2600	2650	2700	2750	2800	2850	2901	2951

P. P.		
	40	41
1	4.0	4.1
2	8.0	8.2
3	12.0	12.3
4	16.0	16.4
5	20.0	20.5
6	24.0	24.6
7	28.0	28.7
8	32.0	32.8
9	36.0	36.9

	42	43
1	4.2	4.3
2	8.4	8.6
3	12.6	12.9
4	16.8	17.2
5	21.0	21.5
6	25.2	25.8
7	29.4	30.1
8	33.6	34.4
9	37.8	38.7

	44	45
1	4.4	4.5
2	8.8	9.0
3	13.2	13.5
4	17.6	18.0
5	22.0	22.5
6	26.4	27.0
7	30.8	31.5
8	35.2	36.0
9	39.6	40.5

	46	47
1	4.6	4.7
2	9.2	9.4
3	13.8	14.1
4	18.4	18.8
5	23.0	23.5
6	27.6	28.2
7	32.2	32.9
8	36.8	37.6
9	41.4	42.3

	48	49
1	4.8	4.9
2	9.6	9.8
3	14.4	14.7
4	19.2	19.6
5	24.0	24.5
6	28.8	29.4
7	33.6	34.3
8	38.4	39.2
9	43.2	44.1

	50	51
1	5.0	5.1
2	10.0	10.2
3	15.0	15.3
4	20.0	20.4
5	25.0	25.5
6	30.0	30.6
7	35.0	35.7
8	40.0	40.8
9	45.0	45.9

N. | N² 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P.

N.	N² 0	1	2	3	4	5	6	7	8	9
2.50	6. 2500	2550	2600	2650	2700	2750	2800	2850	2901	2951
51	3001	3051	3101	3152	3202	3252	3303	3353	3403	3454
52	3504	3554	3605	3655	3706	3756	3807	3857	3908	3958
53	4009	4060	4110	4161	4212	4262	4313	4364	4414	4465
54	4516	4567	4618	4668	4719	4770	4821	4872	4923	4974
55	6. 5025	5076	5127	5178	5229	5280	5331	5382	5434	5485
56	5536	5587	5638	5690	5741	5792	5844	5895	5946	5998
57	6049	6100	6152	6203	6255	6306	6358	6409	6461	6512
58	6564	6616	6667	6719	6771	6822	6874	6926	6977	7029
59	7081	7133	7185	7236	7288	7340	7392	7444	7496	7548
2.60	6. 7600	7652	7704	7756	7808	7860	7912	7964	8017	8069
61	8121	8173	8225	8278	8330	8382	8435	8487	8539	8592
62	8644	8696	8749	8801	8854	8906	8959	9011	9064	9116
63	9169	9222	9274	9327	9380	9432	9485	9538	9590	9643
64	6. 9696	9749	9802	9854	9907	9960	$\bar{0}013$	$\bar{0}066$	$\bar{0}119$	$\bar{0}172$
65	7. 0225	0278	0331	0384	0437	0490	0543	0596	0650	0703
66	0756	0809	0862	0916	0969	1022	1076	1129	1182	1236
67	1289	1342	1396	1449	1503	1556	1610	1663	1717	1770
68	1824	1878	1931	1985	2039	2092	2146	2200	2253	2307
69	2361	2415	2469	2522	2576	2630	2684	2738	2792	2846
2.70	7. 2900	2954	3008	3062	3116	3170	3224	3278	3333	3387
71	3441	3495	3549	3604	3658	3712	3767	3821	3875	3930
72	3984	4038	4093	4147	4202	4256	4311	4365	4420	4474
73	4529	4584	4638	4693	4748	4802	4857	4912	4966	5021
74	5076	5131	5186	5240	5295	5350	5405	5460	5515	5570
75	7. 5625	5680	5735	5790	5845	5900	5955	6010	6066	6121
76	6176	6231	6286	6342	6397	6452	6508	6563	6618	6674
77	6729	6784	6840	6895	6951	7006	7062	7117	7173	7228
78	7284	7340	7395	7451	7507	7562	7618	7674	7729	7785
79	7841	7897	7953	8008	8064	8120	8176	8232	8288	8344
2.80	7. 8400	8456	8512	8568	8624	8680	8736	8792	8849	8905
81	8961	9017	9073	9130	9186	9242	9299	9355	9411	9468
82	7. 9524	9580	9637	9693	9750	9806	9863	9919	9976	$\bar{0}032$
83	8. 0089	0146	0202	0259	0316	0372	0429	0486	0542	0599
84	0656	0713	0770	0826	0883	0940	0997	1054	1111	1168
85	8. 1225	1282	1339	1396	1453	1510	1567	1624	1682	1739
86	1796	1853	1910	1968	2025	2082	2140	2197	2254	2312
87	2369	2426	2484	2541	2599	2656	2714	2771	2829	2886
88	2944	3002	3059	3117	3175	3232	3290	3348	3405	3463
89	3521	3579	3637	3694	3752	3810	3868	3926	3984	4042
2.90	8. 4100	4158	4216	4274	4332	4390	4448	4506	4565	4623
91	4681	4739	4797	4856	4914	4972	5031	5089	5147	5206
92	5264	5322	5381	5439	5498	5556	5615	5673	5732	5790
93	5849	5908	5966	6025	6084	6142	6201	6260	6318	6377
94	6436	6495	6554	6612	6671	6730	6789	6848	6907	6966
95	8. 7025	7084	7143	7202	7261	7320	7379	7438	7498	7557
96	7616	7675	7734	7794	7853	7912	7972	8031	8090	8150
97	8209	8268	8328	8387	8447	8506	8566	8625	8685	8744
98	8804	8864	8923	8983	9043	9102	9162	9222	9281	9341
99	8. 9401	9461	9521	9580	9640	9700	9760	9820	9880	9940
3.00	9. 0000	0060	0120	0180	0240	0300	0360	0420	0481	0541

N.	N² 0	1	2	3	4	5	6	7	8	9

P. P.

	50	51
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2	10.0	10.2
3	15.0	15.3
4	20.0	20.4
5	25.0	25.5
6	30.0	30.6
7	35.0	35.7
8	40.0	40.8
9	45.0	45.9

	52	53
1	5.2	5.3
2	10.4	10.6
3	15.6	15.9
4	20.8	21.2
5	26.0	26.5
6	31.2	31.8
7	36.4	37.1
8	41.6	42.4
9	46.8	47.7

	54	55
1	5.4	5.5
2	10.8	11.0
3	16.2	16.5
4	21.6	22.0
5	27.0	27.5
6	32.4	33.0
7	37.8	38.5
8	43.2	44.0
9	48.6	49.5

	56	57
1	5.6	5.7
2	11.2	11.4
3	16.8	17.1
4	22.4	22.8
5	28.0	28.5
6	33.6	34.2
7	39.2	39.9
8	44.8	45.6
9	50.4	51.3

	58	59
1	5.8	5.9
2	11.6	11.8
3	17.4	17.7
4	23.2	23.6
5	29.0	29.5
6	34.8	35.4
7	40.6	41.3
8	46.4	47.2
9	52.2	53.1

	60	61
1	6.0	6.1
2	12.0	12.2
3	18.0	18.3
4	24.0	24.4
5	30.0	30.5
6	36.0	36.6
7	42.0	42.7
8	48.0	48.8
9	54.0	54.9

N.	N² 0	1	2	3	4	5	6	7	8	9
3.00	9. 0000	0060	0120	0180	0240	0300	0360	0420	0481	0541
01	0601	0661	0721	0782	0842	0902	0963	1023	1083	1144
02	1204	1264	1325	1385	1446	1506	1567	1627	1688	1748
03	1809	1870	1930	1991	2052	2112	2173	2234	2294	2355
04	2416	2477	2538	2598	2659	2720	2781	2842	2903	2964
05	9. 3025	3086	3147	3208	3269	3330	3391	3452	3514	3575
06	3636	3697	3758	3820	3881	3942	4004	4065	4126	4188
07	4249	4310	4372	4433	4495	4556	4618	4679	4741	4802
08	4864	4926	4987	5049	5111	5172	5234	5296	5357	5419
09	5481	5543	5605	5666	5728	5790	5852	5914	5976	6038
3.10	9. 6100	6162	6224	6286	6348	6410	6472	6534	6597	6659
11	6721	6783	6845	6908	6970	7032	7095	7157	7219	7282
12	7344	7406	7469	7531	7594	7656	7719	7781	7844	7906
13	7969	8032	8094	8157	8220	8282	8345	8408	8470	8533
14	8596	8659	8722	8784	8847	8910	8973	9036	9099	9162
15	9. 9225	9288	9351	9414	9477	9540	9603	9666	9730	9793
16	9. 9856	9919	9982	$\bar{0}$046	$\bar{0}$109	$\bar{0}$172	$\bar{0}$236	$\bar{0}$299	$\bar{0}$362	$\bar{0}$426
17	10. 0489	0552	0616	0679	0743	0806	0870	0933	0997	1060
18	1124	1188	1251	1315	1379	1442	1506	1570	1633	1697
19	1761	1825	1889	1952	2016	2080	2144	2208	2272	2336
3.20	10. 2400	2464	2528	2592	2656	2720	2784	2848	2913	2977
21	3041	3105	3169	3234	3298	3362	3427	3491	3555	3620
22	3684	3748	3813	3877	3942	4006	4071	4135	4200	4264
23	4329	4394	4458	4523	4588	4652	4717	4782	4846	4911
24	4976	5041	5106	5170	5235	5300	5365	5430	5495	5560
25	10. 5625	5690	5755	5820	5885	5950	6015	6080	6146	6211
26	6276	6341	6406	6472	6537	6602	6668	6733	6798	6864
27	6929	6994	7060	7125	7191	7256	7322	7387	7453	7518
28	7584	7650	7715	7781	7847	7912	7978	8044	8109	8175
29	8241	8307	8373	8438	8504	8570	8636	8702	8768	8834
3.30	10. 8900	8966	9032	9098	9164	9230	9296	9362	9429	9495
31	10. 9561	9627	9693	9760	9826	9892	9959	$\bar{0}$025	$\bar{0}$091	$\bar{0}$158
32	11. 0224	0290	0357	0423	0490	0556	0623	0689	0756	0822
33	0889	0956	1022	1089	1156	1222	1289	1356	1422	1489
34	1556	1623	1690	1756	1823	1890	1957	2024	2091	2158
35	11. 2225	2292	2359	2426	2493	2560	2627	2694	2762	2829
36	2896	2963	3030	3098	3165	3232	3300	3367	3434	3502
37	3569	3636	3704	3771	3839	3906	3974	4041	4109	4176
38	4244	4312	4379	4447	4515	4582	4650	4718	4785	4853
39	4921	4989	5057	5124	5192	5260	5328	5396	5464	5532
3.40	11. 5600	5668	5736	5804	5872	5940	6008	6076	6145	6213
41	6281	6349	6417	6486	6554	6622	6691	6759	6827	6896
42	6964	7032	7101	7169	7238	7306	7375	7443	7512	7580
43	7649	7718	7786	7855	7924	7992	8061	8130	8198	8267
44	8336	8405	8474	8542	8611	8680	8749	8818	8887	8956
45	11. 9025	9094	9163	9232	9301	9370	9439	9508	9578	9647
46	11. 9716	9785	9854	9924	9993	$\bar{0}$062	$\bar{0}$132	$\bar{0}$201	$\bar{0}$270	$\bar{0}$340
47	12. 0409	0478	0548	0617	0687	0756	0826	0895	0965	1034
48	1104	1174	1243	1313	1383	1452	1522	1592	1661	1731
49	1801	1871	1941	2010	2080	2150	2220	2290	2360	2430
3.50	12. 2500	2570	2640	2710	2780	2850	2920	2990	3061	3131

P. P.		
	60	61
1	6.0	6.1
2	12.0	12.2
3	18.0	18.3
4	24.0	24.4
5	30.0	30.5
6	36.0	36.6
7	42.0	42.7
8	48.0	48.8
9	54.0	54.9

	62	63
1	6.2	6.3
2	12.4	12.6
3	18.6	18.9
4	24.8	25.2
5	31.0	31.5
6	37.2	37.8
7	43.4	44.1
8	49.6	50.4
9	55.8	56.7

	64	65
1	6.4	6.5
2	12.8	13.0
3	19.2	19.5
4	25.6	26.0
5	32.0	32.5
6	38.4	39.0
7	44.8	45.5
8	51.2	52.0
9	57.6	58.5

	66	67
1	6.6	6.7
2	13.2	13.4
3	19.8	20.1
4	26.4	26.8
5	33.0	33.5
6	39.6	40.2
7	46.2	46.9
8	52.8	53.6
9	59.4	60.3

	68	69
1	6.8	6.9
2	13.6	13.8
3	20.4	20.7
4	27.2	27.6
5	34.0	34.5
6	40.8	41.4
7	47.6	48.3
8	54.4	55.2
9	61.2	62.1

	70	71
1	7.0	7.1
2	14.0	14.2
3	21.0	21.3
4	28.0	28.4
5	35.0	35.5
6	42.0	42.6
7	49.0	49.7
8	56.0	56.8
9	63.0	63.9

N. | N² 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P.

TAFEL IX.

DIE

ANTILOGARITHMEN.

VON 000 BIS 999.

L	N 0	1	2	3	4	5	6	7	8	9	P. P.
00	1000	1002	1005	1007	1009	1012	1014	1016	1019	1021	
01	1023	1026	1028	1030	1033	1035	1038	1040	1042	1045	
02	1047	1050	1052	1054	1057	1059	1062	1064	1067	1069	
03	1072	1074	1076	1079	1081	1084	1086	1089	1091	1094	4
04	1096	1099	1102	1104	1107	1109	1112	1114	1117	1119	1 0.4
05	1122	1125	1127	1130	1132	1135	1138	1140	1143	1146	2 0.8
06	1148	1151	1153	1156	1159	1161	1164	1167	1169	1172	3 1.2
07	1175	1178	1180	1183	1186	1189	1191	1194	1197	1199	4 1.6
08	1202	1205	1208	1211	1213	1216	1219	1222	1225	1227	5 2.0
09	1230	1233	1236	1239	1242	1245	1247	1250	1253	1256	6 2.4
10	1259	1262	1265	1268	1271	1274	1276	1279	1282	1285	7 2.8
11	1288	1291	1294	1297	1300	1303	1306	1309	1312	1315	8 3.2
12	1318	1321	1324	1327	1330	1334	1337	1340	1343	1346	9 3.6
13	1349	1352	1355	1358	1361	1365	1368	1371	1374	1377	
14	1380	1384	1387	1390	1393	1396	1400	1403	1406	1409	5
15	1413	1416	1419	1422	1426	1429	1432	1435	1439	1442	1 0.5
16	1445	1449	1452	1455	1459	1462	1466	1469	1472	1476	2 1.0
17	1479	1483	1486	1489	1493	1496	1500	1503	1507	1510	3 1.5
18	1514	1517	1521	1524	1528	1531	1535	1538	1542	1545	4 2.0
19	1549	1552	1556	1560	1563	1567	1570	1574	1578	1581	5 2.5
20	1585	1589	1592	1596	1600	1603	1607	1611	1614	1618	6 3.0
21	1622	1626	1629	1633	1637	1641	1644	1648	1652	1656	7 3.5
22	1660	1663	1667	1671	1675	1679	1683	1687	1690	1694	8 4.0
23	1698	1702	1706	1710	1714	1718	1722	1726	1730	1734	9 4.5
24	1738	1742	1746	1750	1754	1758	1762	1766	1770	1774	
25	1778	1782	1786	1791	1795	1799	1803	1807	1811	1816	6
26	1820	1824	1828	1832	1837	1841	1845	1849	1854	1858	1 0.6
27	1862	1866	1871	1875	1879	1884	1888	1892	1897	1901	2 1.2
28	1905	1910	1914	1919	1923	1927	1932	1936	1941	1945	3 1.8
29	1950	1954	1959	1963	1968	1972	1977	1982	1986	1991	4 2.4
30	1995	2000	2004	2009	2014	2018	2023	2028	2032	2037	5 3.0
31	2042	2046	2051	2056	2061	2065	2070	2075	2080	2084	6 3.6
32	2089	2094	2099	2104	2109	2113	2118	2123	2128	2133	7 4.2
33	2138	2143	2148	2153	2158	2163	2168	2173	2178	2183	8 4.8
34	2188	2193	2198	2203	2208	2213	2218	2223	2228	2234	9 5.4
35	2239	2244	2249	2254	2259	2265	2270	2275	2280	2286	
36	2291	2296	2301	2307	2312	2317	2323	2328	2333	2339	7
37	2344	2350	2355	2360	2366	2371	2377	2382	2388	2393	1 0.7
38	2399	2404	2410	2415	2421	2427	2432	2438	2443	2449	2 1.4
39	2455	2460	2466	2472	2477	2483	2489	2495	2500	2506	3 2.1
40	2512	2518	2523	2529	2535	2541	2547	2553	2559	2564	4 2.8
41	2570	2576	2582	2588	2594	2600	2606	2612	2618	2624	5 3.5
42	2630	2636	2642	2649	2655	2661	2667	2673	2679	2685	6 4.2
43	2692	2698	2704	2710	2716	2723	2729	2735	2742	2748	7 4.9
44	2754	2761	2767	2773	2780	2786	2793	2799	2805	2812	8 5.6
45	2818	2825	2831	2838	2844	2851	2858	2864	2871	2877	9 6.3
46	2884	2891	2897	2904	2911	2917	2924	2931	2938	2944	
47	2951	2958	2965	2972	2979	2985	2992	2999	3006	3013	8
48	3020	3027	3034	3041	3048	3055	3062	3069	3076	3083	1 0.8
49	3090	3097	3105	3112	3119	3126	3133	3141	3148	3155	2 1.6
50	3162	3170	3177	3184	3192	3199	3206	3214	3221	3228	3 2.4
											4 3.2
											5 4.0
											6 4.8
											7 5.6
											8 6.4
											9 7.2
L	N 0	1	2	3	4	5	6	7	8	9	P. P.

L	N 0	1	2	3	4	5	6	7	8	9
50	3162	3170	3177	3184	3192	3199	3206	3214	3221	3228
51	3236	3243	3251	3258	3266	3273	3281	3289	3296	3304
52	3311	3319	3327	3334	3342	3350	3357	3365	3373	3381
53	3388	3396	3404	3412	3420	3428	3436	3443	3451	3459
54	3467	3475	3483	3491	3499	3508	3516	3524	3532	3540
55	3548	3556	3565	3573	3581	3589	3597	3606	3614	3622
56	3631	3639	3648	3656	3664	3673	3681	3690	3698	3707
57	3715	3724	3733	3741	3750	3758	3767	3776	3784	3793
58	3802	3811	3819	3828	3837	3846	3855	3864	3873	3882
59	3890	3899	3908	3917	3926	3936	3945	3954	3963	3972
60	3981	3990	3999	4009	4018	4027	4036	4046	4055	4064
61	4074	4083	4093	4102	4111	4121	4130	4140	4150	4159
62	4169	4178	4188	4198	4207	4217	4227	4236	4246	4256
63	4266	4276	4285	4295	4305	4315	4325	4335	4345	4355
64	4365	4375	4385	4395	4406	4416	4426	4436	4446	4457
65	4467	4477	4487	4498	4508	4519	4529	4539	4550	4560
66	4571	4581	4592	4603	4613	4624	4634	4645	4656	4667
67	4677	4688	4699	4710	4721	4732	4742	4753	4764	4775
68	4786	4797	4808	4819	4831	4842	4853	4864	4875	4887
69	4898	4909	4920	4932	4943	4955	4966	4977	4989	5000
70	5012	5023	5035	5047	5058	5070	5082	5093	5105	5117
71	5129	5140	5152	5164	5176	5188	5200	5212	5224	5236
72	5248	5260	5272	5284	5297	5309	5321	5333	5346	5358
73	5370	5383	5395	5408	5420	5433	5445	5458	5470	5483
74	5495	5508	5521	5534	5546	5559	5572	5585	5598	5610
75	5623	5636	5649	5662	5675	5689	5702	5715	5728	5741
76	5754	5768	5781	5794	5808	5821	5834	5848	5861	5875
77	5888	5902	5916	5929	5943	5957	5970	5984	5998	6012
78	6026	6039	6053	6067	6081	6095	6109	6124	6138	6152
79	6166	6180	6194	6209	6223	6237	6252	6266	6281	6295
80	6310	6324	6339	6353	6368	6383	6397	6412	6427	6442
81	6457	6471	6486	6501	6516	6531	6546	6561	6577	6592
82	6607	6622	6637	6653	6668	6683	6699	6714	6730	6745
83	6761	6776	6792	6808	6823	6839	6855	6871	6887	6902
84	6918	6934	6950	6966	6982	6998	7015	7031	7047	7063
85	7079	7096	7112	7129	7145	7161	7178	7194	7211	7228
86	7244	7261	7278	7295	7311	7328	7345	7362	7379	7396
87	7413	7430	7447	7464	7482	7499	7516	7534	7551	7568
88	7586	7603	7621	7638	7656	7674	7691	7709	7727	7745
89	7762	7780	7798	7816	7834	7852	7870	7889	7907	7925
90	7943	7962	7980	7998	8017	8035	8054	8072	8091	8110
91	8128	8147	8166	8185	8204	8222	8241	8260	8279	8299
92	8318	8337	8356	8375	8395	8414	8433	8453	8472	8492
93	8511	8531	8551	8570	8590	8610	8630	8650	8670	8690
94	8710	8730	8750	8770	8790	8810	8831	8851	8872	8892
95	8913	8933	8954	8974	8995	9016	9036	9057	9078	9099
96	9120	9141	9162	9183	9204	9226	9247	9268	9290	9311
97	9333	9354	9376	9397	9419	9441	9462	9484	9506	9528
98	9550	9572	9594	9616	9638	9661	9683	9705	9727	9750
99	9772	9795	9817	9840	9863	9886	9908	9931	9954	9977
00	0000									

P. P.		
	9	11
1	0.9	1.1
2	1.8	2.2
3	2.7	3.3
4	3.6	4.4
5	4.5	5.5
6	5.4	6.6
7	6.3	7.7
8	7.2	8.8
9	8.1	9.9
	12	13
1	1.2	1.3
2	2.4	2.6
3	3.6	3.9
4	4.8	5.2
5	6.0	6.5
6	7.2	7.8
7	8.4	9.1
8	9.6	10.4
9	10.8	11.7
	14	15
1	1.4	1.5
2	2.8	3.0
3	4.2	4.5
4	5.6	6.0
5	7.0	7.5
6	8.4	9.0
7	9.8	10.5
8	11.2	12.0
9	12.6	13.5
	16	17
1	1.6	1.7
2	3.2	3.4
3	4.8	5.1
4	6.4	6.8
5	8.0	8.5
6	7.6	10.2
7	11.2	11.9
8	12.8	13.6
9	14.4	15.3
	18	19
1	1.8	1.9
2	3.6	3.8
3	5.4	5.7
4	7.2	7.6
5	9.0	9.5
6	10.8	11.4
7	12.6	13.3
8	14.4	15.2
9	16.2	17.1
	20	21
1	2.0	2.1
2	4.0	4.2
3	6.0	6.3
4	8.0	8.4
5	10.0	10.5
6	12.0	12.6
7	14.0	14.7
8	16.0	16.8
9	18.0	18.9
	22	23
1	2.2	2.3
2	4.4	4.6
3	6.6	6.9
4	8.8	9.2
5	11.0	11.5
6	13.2	13.8
7	15.4	16.1
8	17.6	18.4
9	19.8	20.7

L | N 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | P. P.

Beständige Logarithmen.

		log	
Basis der natürlichen Logarithmen e	= 2,7182 8183 .	0.4342 9448	
Modul der gemeinen Logarithmen m	= 0,4342 9448 .	9.6377 8431	— 10
Radius des Kreises in Graden	= 57.29578 . . .	1.7581 2263	
„ „ „ in Minuten	= 3437.7468 . . .	3.5362 7388	
„ „ „ in Secunden	= 206264.8 . . .	5.3144 2513	
Umfang des Kreises in Graden	= 360	2.5563 0250	
„ „ „ in Minuten	= 21600	4.3344 5375	
„ „ „ in Secunden	= 1296000 . . .	6.1126 0500	
Verhältniss des Durchmessers zum Umkreis π	= 3.1415 9265 . .	0.4971 4987	

Dimensionen der Erde, nach Bessel.

		m		
Halbe grosse Axe (Radius des Aequators)	a =	6377397.156	6.8046 4346	
„ kleine (Umdrehungsaxe)	b =	6356079.175	6.8031 8930	
Abplattung $\frac{a-b}{a} = \frac{1}{299.1528}$	=	0.00334277	7.5241 0699	— 10
Excentric. d. Umdreh.-Ellipse $\sqrt{\frac{a^2-b^2}{a^2}}$ = e =		0.08169683	8.9122 0521	— 10
$\sqrt{1-e^2}$	=	0.99665723	9.9985 4583	— 10
Ein Grad des Aequators = 111306.6 Meter			5.0465 208	
Eine geographische Meile = 7420.437 Meter . . .			3.8704 295	

Massvergleichung.

1 Kilometer = 0,134763	geographische Meile . . .	9.1295 705	— 10
„ = 0,132758	preussische Meile	9.1230 62	— 10
„ = 0,621382	englisch Statue mile à 1760 Yard	9.7933 59	— 10
„ = 0,656180	englische Mile á 1666⅔ Yard	9.8170 23	— 10
„ = 0,937400	russische Werst	9.9719 25	— 10
1 Meter = 0.2655167	preussische Ruthen	9.4240 92	— 10
„ = 3.186200	rheinländische Fuss	0.5032 73	
„ = 3.078444	pariser Fuss	0.4883 31	
„ = 3.280898	englische Fuss	0.5159 93	
1 Liter = 0.873339	preussische Quart	9.9411 83	— 10
„ = 0.706648	österreichische Mass	9.8492 03	— 10
„ = 0.220096	engl. imp. Gallon	9.3426 13	— 10
1 Kilogramm = 2.13807	preussische Pfund	0.3300 22	— 10
„ = 4.27615	preussische Mark	0.6310 53	
„ = 1.78566	österreichische Pfund . . .	0.2517 99	
„ = 2.20464	englische Pfund avoirdupois	0.3433 37	
„ = 2.67924	englische Troy Pfund . .	0.4280 12	

Gold, nach der gesetzlichen Ausprägung.

1 Zwanzigmarkstück = 2.08264	Ducaten	0.3186 15	
„ = 19.5806	Engl. Schilling . .	1.2918 26	
„ = 4.76437	Dollar	0.6780 05	
„ = 24.6913	Francs	1.3925 45	

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